OUR PUPILS

E. LEIGH MUDGE

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BY E. LEIGH MUDGE

OUR PUPILS: PSYCHOLOGY FOR CHURCH SCHOOL TEACHERS

THE PSYCHOLOGY OF EARLY ADOLESCENCE

THE PSYCHOLOGY OF LATER ADOLESCENCE

OUR PUPILS

Psychology for Church School Teachers

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E. LEIGH MUDGE

Approved by the Committee on Curriculum of
the Board of Education of the Methodist
Episcopal Church

THE METHODIST BOOK CONCERN
NEW YORK CINCINNATI CHICAGO

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Printed in the United States of America

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INTRODUCTION

This textbook is designed particularly for the use of teachers and those in training to become teachers in the church school. It is hoped that it may be used also by leaders in other types of religious work with children and young people, and may be a profitable handbook for parents and all others interested in religious education. You who will read this book are probably interested in some specific pupil or group of pupils. These may be in the kindergarten, or in any elementary or secondary grade, and, of course, you are interested in learning all you can about boys and girls of that particular age. Before you make a special study of your kindergarten children, high-school students, or whatever your group may be, it is important to have as much knowledge as possible of characteristics that are relatively common to all pupils. This book is planned to lead the student to some general knowledge of human personality, and to furnish a foundation for the later study that is provided in the leadership training series for teachers of special age groups.

It must not be forgotten, however, that your pupils cannot be treated merely as a group. They must be studied individually, and such a study will make clear that there are wide individual differences with which every teacher should be familiar. While we attempt to discover those characteristics that are relatively common to human nature, we must recognize the facts that constitute the personality of each individual.

In this book we shall discuss some of the traits and elements of human psychology that are most common and general with special reference to the use of this information in the teaching of religion. The teacher in the church school must utilize the very same intellectual and emotional elements of personality that are recognized by the teacher in the public school. It is the same pupil who goes to the public school on week-days and who comes to us on Sunday, or on the other days in which we have an opportunity to train his religious life. Let us become acquainted, so far as is possible, with the nature of our pupils, their native powers, interests, ambitions, fears, and hopes, and let us interpret the more general facts of psychology in terms of the lives of our own boys and girls.

After having read this book, the author hopes that you will read more advanced books on this subject. For this purpose, selected bibliographies have been placed at the ends of the chapters. It is also desired that as soon as possible you follow this course with a specialization course dealing with the limited age group to which as a faithful teacher you may devote yourself.

CHAPTER I

WHAT OUR PUPILS ARE

If you are to become thoroughly prepared to participate in a manufacturing process, particularly if you are to have some supervisory responsibility for other workers, it is important that you become acquainted with raw materials and with all stages of the process of manufacture. If this is true of the maker of shoes, or clothing, or steel rails, or textbooks, how much more important that the teacher who is engaged in the development of character and efficient personality shall know the nature of his pupils and be familiar with the various stages of their development! He is working with living material rather than with metal, or paper, or wood. The problem of understanding the human material with which he is dealing is therefore much more complex than are the problems of the factory worker.

The centrality of personality.—In religious education, as in all worthy education, persons are central. The Christian motive for education centers in the life, the nature and the possibilities of the pupil himself. When the Christian church follows the example and spirit of its Master and places the child in the midst, it does so from no ulterior motive. The welfare of the child himself and his development into his higher possibilities are the ends to be achieved. It is, therefore, necessary that we become familiar with the nature of personality and with the traits and characteristics that are common to all persons, and that we learn how to apply this knowledge in the interest of the physical, intellectual, moral, and spiritual development of our pupil.

The church-school teacher or prospective teacher who reads this book must learn many things in order to be efficient in his work. He must study not only books but children and young people. There are many things that he must learn by actual first-hand contact with pupils in the classroom. He needs to learn methods of teaching; he must be familiar with the administrative problems of the school, know how to organize a class, a department, or an entire school for effectual educational work. But his most fundamental and primary task will be that of becoming familiar with his pupils, their nature, their interests, their needs, and their possibilities. Eventually he must become familiar with the psychology of the age group with which he works, but before entering this specialized field it is important to know some of the general traits and capacities of all normal pupils.

Pupils are different.—In the public schools and the church schools of our own and other lands there are many millions of pupils, and each of them is different in some particulars from all the others. They differ in age, in mental capacity, in social opportunity, and in numberless other relationships that deeply affect the nature of their personalities. Therefore, when we discuss "the pupil," it must be understood that we are concerned with those elements in personality that are relatively common rather than with the full round of life and experiences of any individual person or group of persons.

Unitary personality.—It will profit us greatly in our study of our pupils to realize that there is a practical unity of personality that blends together the different phases and elements of life. An earlier psychology which is now generally abandoned laid great emphasis upon certain separate and distinct attributes, such as memory, reverence, imagination, reasoning, and many others, each of which was considered to be relatively independent and subject to training apart from other phases of personality. Psychologists now are generally agreed that although the human personality is exceedingly complex and characterized by a wide variety of phases and conditioning factors, it is to be considered as fundamentally a unit. To be sure, as a student in a classroom a pupil has developed a certain type of behavior that is quite different from his behavior in the bleachers of the athletic field or in a worship service, but this does not mean that the same pupil is three different persons in these three different situations. There is nothing inconsistent in at one time being a studious member of a class, at another time an excited, hilarious member of a football team, and at still another time a quiet and reverent participant in an experience of worship.

Life is growth.—Please keep in mind in your study throughout this book the central fact that life is growth. No single picture is sufficient to describe a developing personality. Your pupils are changing before your eyes. They must undergo a constant process of development in that most interesting journey from infancy to adult life. There are normal developments in the lives of adult men and women, but after the personality is shaped at the end of adolescence the ways of life are less adventurous. There are fewer changes, and the amazing growth of earlier years can never be duplicated. Child life is a period of fairy-tale romance. Adolescence sees the world aflame with a new glory, and we must always take account of the shifting, changing, growing, developing nature of our pre-adult students.

How to classify our pupils.—The student of the nature and training of pupils is always subject to a temptation to make conclusions that are too general and hence too simple. It is easy to grade and classify our pupils by some fixed and perhaps arbitrary system of grouping. Of course there is value in classification. In working with numbers of persons it becomes necessary to devise some system of measurement whereby we may assemble them into convenient and fairly homogeneous groups. The easiest method is based upon chronological age. There are other factors, however, that should be considered. Boys and girls of the same chronological age often differ widely in their mental abilities or in what is sometimes termed "mental age." There are also variations due to different rates of physiological development, and this gives rise to the term, "physiological age." In practice it is frequently necessary to determine the interests and abilities of the average pupil of a given chronological age and base our classification upon such averages.

While it is essential for study that we divide the developmental period beginning with birth and continuing to adult life into certain periods, let us remember that in growing up no one suddenly leaps from one period into another. A child grows to adolescence and adult life by a continuous process. A tree does not greatly change its nature when its trunk reaches the diameter of two inches. The following day it is very similar to what it was before, but it differs considerably from a tree with a diameter of four inches. So a child is little different on the day after his birthday from what he was the day before, but a child of three years differs quite decidedly from what he will be at the age of six and there are noticeable changes as he grows older.

A working classification.—There are certain relatively distinct natural divisions in the process of development. Puberty at the beginning of adolescence is such a division point. At the age of about twelve or thirteen, differing in individuals and differing quite noticeably between boys and girls, are certain definite and important developments in the physical and mental nature. These developments appear gradually, but are relatively rapid and distinct as compared with the developments of other periods. So we may divide the growth of our pupil into two major parts—childhood and adolescence. Experience with boys and girls has led to certain subdivisions of these major periods into shorter periods. It is the work of education to direct the natural activities of our pupils in such a way as to encourage continual well-balanced growth. In order to accomplish this end with large numbers of pupils we find it practically necessary to group them in departments and classes. Using the chronological age as a rough, approximate measure of average growth, these subdivisions are commonly given as follows:

Infancy, from birth to 3.
Early Childhood, 4 and 5.
Middle Childhood, 6 to 8.
Later Childhood, 9 to 11.
Early Adolescence, 12 to 14.
Middle Adolescence, 15 to 17.
Later Adolescence, 18 to about 24.

MIND AND CONSCIOUSNESS

The term "mind" is commonly used in a somewhat different sense from the term "consciousness." Consciousness means that part of the personality of which one is aware at any given instant, while mind includes the mass of experiences, past and present, which affect consciousness and make its widely varied experiences possible. The mind, however, should not be considered a mere mass, whether of ideas, thoughts, nervous impulses, or any other simple and settled combination of things. It is always essentially a process. It is alive. It is moving. Our mental processes have often been described as a stream of experiences. The entire stream may be called mind. The term "consciousness" may be used for a cross section of the stream at any particular point or at least for that part of a cross section of which we are clearly aware at any particular time.

The complexity of mental life.—The content of the mind is always exceedingly complex. There are no simple mental experiences. Even one so apparently simple as the pain of a pin prick is combined with the memory of previous pains and with other memories, causing feelings that may be distinct from the actual physical sensation. Perhaps there are related attitudes of fear, and other elements that make the total experience really very complicated. When one considers that all the facts of our knowledge, all the elements of truth in our experiences, all of the marvelous, complex mass of information about anything in the universe that one can recall, is in some mysterious way present in our minds, the complex nature of mind becomes apparent.

The relation of mind and body.—A complex mind is affected by the complicated physical organism that we call the body. Every part of the body has its effect upon mental life. Emotional experiences, for example, are very closely related to the functions of the digestive and circulatory systems. All the major organs of the body, the heart, the liver, the lungs, the kidneys, and many other organs influence mental experiences and are influenced by them. In recent years there has been considerable study of the remarkable effects of the endocrine or so-called ductless glands. These glands include the thyroid, parathyroid, thymus, adrenal, sex glands, and the pituitary bodies. They are vitally related to all sorts of mental experiences.[1]

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[1] For example, the adrenal glands throw into the blood a secretion called adrenalin. This substance has a stimulating or tonic effect upon the heart and the general muscular system and at the same time a depressing or inhibiting effect upon the digestive tract. Intense emotions such as anger or fear, stimulate the adrenal glands, causing them to pour increased amounts of adrenalin into the blood. The immediate effect of this is the whipping up of the heart to unaccustomed effort and the stimulation of the larger muscles. This explains, in part, why, under the influence of anger or fear, men have often been able to

The nature of the mind and the body.—What the mind may be apart from the body is a problem we must leave to philosophy rather than to science. What we are to consider in this book is that the personality as we know it reacts to various stimulations and influences. The essential fact is that the entire personality is capable of training or education, and we need not separate one element of the personality from another. Perhaps both mind and body are phases of the same ultimate reality. Certainly both phases must be considered. The mind and the body must be trained together and the nature of our pupils must be studied both through our knowledge of ourselves by introspection and through the knowledge of our pupils which we may gain by experiment and careful observation of their behavior.

THE SUBCONSCIOUS

Consciousness, in the sense of awareness, is a very small island in the great ocean of mental experiences of which we are unconscious. The nature of the subconscious elements of our personality we need not consider at this time. We need only recognize that there are a vast number of elements with which the student of psychology is concerned that

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accomplish what otherwise seem to be impossible feats of physical strength. The effect of this same gland on the digestive tract is illustrated by the following experiment. From the body of a sheep just killed a section of the small intestine is taken and is immediately suspended in a solution of salt water of the temperature of the sheep's body. The rings of muscles about the intestines will continue for some time the rhythmic contractions and relaxations called the peristaltic movements. Now let a drop of adrenalin be added to the warm salt water and immediately these movements cease.

are not always in the focus of our conscious recognition. Various figures of speech have been used in the endeavor to describe the relation of the subconscious to the conscious. Some use the word "threshold" to indicate the point where consciousness begins and below which lies the mass of subconscious experiences. The word "fringe" has also been used to describe the area which seems to surround our consciousness, shading off into unconsciousness. It is probable, at any rate, that there is, remaining in your mind or treasured in some mysterious way in your nervous system, a record of a vast number of apparently wholly forgotten ideas, experiences, feelings, and sensations of your past life, that could, if the proper associations were established, be brought into consciousness. The distinction that we shall use between the subconscious and the conscious is merely a distinction in awareness.

When we are thoroughly conscious of a given thing or idea, we hold it in the focus of attention. Anything that is near this focus or center of attention may be said to be conscious, while those mental processes that are so far from the focus of attention that we are not aware of them may be called subconscious. Included in subconscious states will be dreams and similar states and the whole mass of associations or conditions by which we treasure our memories of the past and out of which these memories may be brought into clear consciousness. The character of your pupils depends upon the ideas and ideals, the principles and habits of thought and action that they have gradually stored up as subconscious elements in their minds. The subconscious is not a separate part of the mind. It is the content of the mind itself which is at any moment beneath the threshold of consciousness.

THE SOCIAL NATURE

In order to understand your pupil you must know that he is a social personality. There is no such thing as absolutely individual psychology, in the sense of a single personality without reference to other personalities. It is the nature of all persons to behave with reference to other persons. "No man liveth to himself."

It is necessary for the teacher constantly to realize that the individual pupil must be studied with relation to various social groups. In order to understand our pupils we must know something of their homes, their activities in the public school, their various play groups, and all the other social groupings in which they find themselves. Their behavior differs according to these social situations. The work of the church school is chiefly to develop in our pupils a wholesome social life, so that they will become increasingly useful to the world about them and will participate in that serving of humanity to which our Christian faith summons us all. Wholesome religious experience must be social.

As children come into the world their interests are primarily individualistic rather than social. The infant cares chiefly about the satisfaction of his own appetites and desires. His interest in other people is at first centered in their ability to satisfy these desires. For example, his affection for his mother is of a very different, more primitive type than the affection of his mother for him. The mother loves her child disinterestedly and to the point of self-sacrifice. The child loves the mother in proportion to what she does for the child.

However, there is in the infant the beginning of a social nature. He gradually becomes interested in persons, first in his mother, then in other members of his family. Soon he develops a special interest in other children and from this point his social development is relatively rapid. Normally there should be a constant development in social interest throughout childhood and adolescence until the altruistic spirit that thinks first of the needs and desires of others shall be uppermost. This does not mean that all egoistic impulses must be eliminated. It is normal and legitimate for any person to desire and seek for certain personal advantages. As one approaches adult life, however, the dominating motives should be social interest in others and a desire to help them rather than the motives of egoism and self-seeking. Religious education does not seek to destroy the individualistic impulses, but to bring them into harmony with a growing and eventually dominant altruism. Religion may be considered a harmonizing agency.

HEREDITY

What our pupil is depends fundamentally in very great degree upon his parents and more remote ancestors. From them he inherits such physical features as stature, coloration, and the relative sizes of the various parts of the body. He inherits also wide variations in the structure of glands, of the nervous system, and of other bodily organs; and there are, in fact, very wide hereditary differences in all the physical elements of his being. Many elements in his personality are absolutely fixed by heredity. "Man cannot by taking thought add one cubit to his stature" nor change the color of his eyes. It has been observed also that special abilities for painting, or music, or mechanics, seem to be transmitted from parent to child. While it cannot be said that musical skill is transmitted, there are doubtless elements of fundamental musical ability, such as the tendency to distinguish variations in pitch or to produce a given musical tone with the voice, that are fixed by heredity. It seems that certain mental characteristics, such as slowness or quickness of thinking, or a tendency to be industrious or moody, are transmitted as hereditary elements in life.

ENVIRONMENT

If heredity told the whole story of the nature of the pupil, if all the elements of his life were fixed by the fundamental, normal laws of heredity, there would be no need for teachers and no chance for improvement. But the surroundings of a child, those influences coming from other persons with whom he associates, have a powerful influence upon his nature. We may consider heredity as the basis or foundation of the structure of life. We must build upon the foundation which nature has given to our pupil. If he is feeble-minded, we can educate only with reference to this native defect. If, on the other hand, he is unusually intelligent and quick to respond to training, we have a very different foundation upon which to build. What structure we shall build upon the foundation depends on training and environment. A little study of a given pupil and of the environmental surroundings of his life will illustrate this point clearly. Our pupil has a native tendency to speech, but whether this tendency results in clear enunciation and intelligible expression or in careless pronunciation habits or in inelegant language depends in very great degree upon the speech which he has heard.

HEREDITY AND ENVIRONMENT IN EDUCATION

It is vastly important in the development of all phases of life that a child shall have a wholesome environment, even in his infancy. The first few years of life are vitally important in establishing attitudes and habits, and have a great part in determining the intellectual, moral, æsthetic, and religious nature of later years. It is important that an infant shall experience gentle touches, soft colors, musical sounds, rather than harsh and unpleasant sensations. It is important also that throughout childhood and adolescence boys and girls be surrounded by influences of culture, character, and religion.

Education is the process of developing the native powers and possibilities of our pupils through the modification of their environment, surrounding them by influences that are wholesome and in all possible ways influencing toward the desirable changes. Education cannot take the place of heredity, but whatever may be our pupil's native equipment, through educational influences, it can be used, developed and guided to his great profit and improvement. The importance of the teacher in character training can hardly be overestimated.

CLASSIFICATION OF CHILDHOOD AND ADOLESCENCE

PERIODS	AGE	GRADE	PUBLIC SCHOOL	CHURCH SCHOOL
Infancy	Birth to 3		Pre-school	Cradle Roll
Early Childhood	4	Kindergarten	Kindergarten	Beginners
	5	Kindergarten		
Middle Childhood	6	1	Lower Grades	Primary
	7	2		
	8	3		
Later Childhood	9	4	Upper Grades	Junior
	10	5		
	11	6		
Early Adolescence	12	7	Junior High School	Intermediate
	13	8		
	14	9		
Middle Adolescence	15	10	Senior High School	Senior
	16	11		
	17	12		
Later Adolescence	18 to 24		College and University	Young People
Adult Life	25 and after		Adult	Adult

PROBLEMS

1. What differences have you observed between brothers and sisters in the same family?

2. Are you acquainted in any close and intimate degree with all your pupils?

3. What plans can you make for getting better acquainted with the members of your class?

4. Do you know any "identical twins"? What differences between them can you discover?

5. Make lists of the interests of:
    (*a*) Children of six.
    (*b*) Boys of ten.
    (*c*) Girls of ten.
    (*d*) Boys of fifteen.
    (*e*) Girls of fifteen.

6. What do your pupils do at a party or a basketball game? In a session of your class? In a worship service?

7. Are there pupils in your class who are of too low a mental age for their grade? Have you any especially bright or "supra-normal" pupils?

8. Describe your feelings and actions when you have been frightened.

BOOKS FOR FURTHER READING

A Social Theory of Religious Education, Coe, Chapter X.
Psychology, Woodworth, Chapter XXI.
Introduction to Psychology, Seashore, Chapter XIV.
Psychology for Teachers, LaRue, Chapter II.
Personality and Social Adjustment, Groves.
The Practical Psychology of Babyhood, Fenton.
Psychology of Infancy and Early Childhood, Arlitt.

The Psychology of Early Childhood Up to Six Years, Sterne.

The Psychology of the Kindergarten—Primary Child, Pechstein and Jenkins.

Wholesome Childhood, Groves and Groves.

The Psychology of Childhood, Norsworthy and Whitley.

A Study of the Little Child, A Study of the Primary Child, A Study of the Junior Child, Whitley.

The Junior, Chave.

The Child, His Nature and His Needs, The Valparaiso Foundation.

The Normal Growth of the Pre-school Child, Gessell.

CHAPTER II

THE NATIVE ENDOWMENT OF OUR PUPILS

The fact that certain traits in parents are transmitted to their children has been recognized since very early times. Adam is described in Genesis as begetting a son "after his image," and the resemblances of personal appearance and perhaps also of other personal traits have been observed from far antiquity. When in the Ten Commandments the iniquity of the fathers is described as being "visited upon the children, upon the third and upon the fourth generation," there is probably some element of heredity in mind. The careful observation and study of hereditary elements in personality are, however, of modern date.

Heredity

It is important that we understand just what our pupil inherits. There have been many errors, some of them serious, at this point. He does not inherit the character of his parents or other ancestors or their personal habits or experience. What he does inherit, not merely from parents, but from his more remote forebears, is certain tendencies, some relatively simple and others very complex, affecting bodily structure and growth, mental potentialities and dispositions, and a vast organization of tendencies some held in common with all humanity, some determining his individual personality and temperament. Early Calvinism, including the

Puritanism of the American colonies, held that all humanity inherits the guilt of the first man.

> "In Adam's fall
> We sinned all,"

declared the *New England Primer*. The effect of this extreme doctrine was for a long time a chief hindrance to religious education. There is little encouragement for training children if they are born with the depravity of native guilt in their natures. The saying of Jesus, "to such belongeth the kingdom of God," indicates a better attitude. This does not mean that children are born with developed characters. They are born neither moral nor immoral but, rather, non-moral, with the possibilities of good or evil qualities, depending upon their training and environment.

Principles of heredity.—Probably the most important discoveries concerning heredity were those made by Gregor Mendel about the middle of the nineteenth century. These discoveries were not recognized or generally known by scientists until about 1900, when they were rediscovered and their significance was appreciated. As Mendel discovered, the traits or characteristics that are transmitted (the biologist calls them "characters") are not blends or mixtures of the traits of earlier generations, but rather are transmitted from one parent or the other as units. Thus the child of a dark-haired mother and a light-haired father does not necessarily have hair of an intermediate brown. More likely his hair will resemble that of one of his parents. It may, however, be different from that of either parent, resembling that of some grandparent or great-grandparent who had red hair. The fundamental peculiarities that distinguish a race or a family are inherited, and heredity is stubborn and fixed. The Ethiopian cannot change his color. The royal family of Hapsburg is marked by a characteristic shape of the nose and the general facial contour. We are all familiar with noticeable resemblances in families of our acquaintance. Notice them in the families represented in your class.

Our complex heredity.—A certain appreciation of one's family connections is wholesome and proper. Frequently what we most value in the families of which we are proud of being members are not the biological elements transmitted to us so much as the social customs and habits that have developed in the family environment. While we may well maintain our sense of family connection, we should not overrate the importance of the hereditary factors involved. Our family heredity is not a simple matter of the transmission of the blood of a worthy line of ancestors. It involves a wide variety of strains, each of which may have its part in determining what our native endowment may be.

Suppose you are a member of the family of Goodname. You are properly gratified that you are a descendant of a notable ancestry and bear some resemblance to your distinguished forefathers. But you are not merely a son of John Goodname; you inherit perhaps as many traits from your mother, who was of another family. You are really only half Goodname. But your heredity may be affected as much by the second generation back as by your own parents, and by the measure of your grandparents you are only one fourth Goodname.

Another generation back and you are one eighth Goodname, and so on. Going back six generations you have a total of 126 ancestors, only six of whom were Goodnames. The rest were a mixture of Smiths, Browns, and many other family strains.

A few years ago a scientist traced many lines of descent from a certain noble lady named Isabelle de Vermandois and found that many of the distinguished men of England and America during the past century or two were descended from the same ancestress. Probably we should be near the truth if we were to assert that all the people of British stock have common elements in their ancestry, being descended not only from Isabelle de Vermandois, but from many others of her time, princes and paupers, kings and criminals. A study of family trees is a wholesome antidote for overweening family pride.

Inheritance of mental traits.—There can be no doubt that certain elements in the mental equipment of an individual person are fixed at birth. There are capacities and aptitudes that are irrevocably bestowed by heredity. There are mental as well as physical disorders and limitations that are transmitted from parent to child. A tendency to epilepsy or dementia præcox seems in many cases to be inherited, although in the case of most diseases all that is transmitted by heredity is some constitutional weakness that renders one especially susceptible.

Feeble-mindedness.—The transmission of feeble-mindedness is beyond question. It is generally recognized that when two feeble-minded persons marry, their progeny are frequently marked by the parental defect. Several notable studies of feeble-mindedness in family groups have been made, perhaps the one most widely known being Goddard's account of the Kallikak family.[1] In this study Doctor Goddard traced the ancestry of a girl in a school for the feeble-minded back to an ancestor who lived at the time of the American Revolution, to whom was given the shielding name of Martin Kallikak. As a young soldier, Martin met a feeble-minded girl by whom he became the father of an illegitimate and feeble-minded son. Later he married a woman of normal mentality. A study of the descendants of Martin Kallikak, through the illegitimate union and through the lawful marriage, presents a vivid contrast. The descendants of the feeble-minded mother have included a great number of defectives, criminals, prostitutes, and drunkards, while the descendants of the normal-minded mother have included very few unworthy characters. Another important study of heredity is that of the famous Edwards family.[2] These studies indicate that both the higher and the lower degrees of intelligence follow the laws of heredity.[3]

Individual mental variations.—Probably there are none of your pupils who are of extremely limited mental ability. It is important, however, to realize that there are wide variations in native talent or capacity. Some of your pupils may be above the average in intelligence; others may be very dull and slow to learn. Often the unusually bright or supranormal pupil, because he needs to devote less time to his studies than does the average pupil, acquires habits of idleness and mischief-making that make of him a practical joker or a pupil who will not co-operate in the regular activities of the class. An internationally famous scientist came near wasting the opportunities of his boyhood because he could not accommodate himself to the slower thinking and working of his classmates. While the rank and file of your pupils, who are of average intelligence, need a full measure of your attention, you should give some special heed to those who are above or below the average. Most of our pupils are capable of far more thorough training than they get.

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[1] *The Kallikak Family*, by H. H. Goddard.

[2] *Heredity in Relation to Eugenics*, by C. B. Davenport.

[3] The control of feeble-mindedness presents a very important social problem. Denial of marriage to the feeble-minded is essential to its solution. It is believed by many that all feeble-minded persons should either be rendered sterile by a surgical operation or should be confined in institutions where they can be trained according to their ability and may avoid the cruel exploitation and suffering incident to a hopeless attempt at independent self-support.

Social heredity.—The fact that biological heredity sets limits upon the capacities of our pupil should not obscure the further fact that within these limits our pupil is capable of extensive training. Indeed, Benjamin Kidd insists that social heredity, by which he means the environment that develops social ideals and traditions, is much more important in its influence upon civilization than biological heredity.[4] No invidious comparison is necessary. Without either type of heredity civilization would be impossible. Nevertheless, as Kidd indicates, the importance of that social heredity which collects the world's experience and passes it on, through unconscious influence or conscious education, from one generation to another, can scarcely be overestimated.

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[4] *The Science of Power*, by Benjamin Kidd.

NATIVE TENDENCIES

We are born with a complicated variety of natural tendencies. They are as native and essential to us as our hands or our feet. Many responses to our environment do not require learning at all. A child does not have to be taught to use his muscles—he uses them. But he can be taught more effective ways of using them. He has a native, instinctive tendency to walk, to weep, to laugh, to utter vocal sounds. But he must be taught to form those vocal sounds into intelligible speech. A vast number of human activities do not have to be learned, although learning is necessary in order to use them more effectively.

Automatic acts.—Nature has made automatic those physical reactions that are necessary to life. They are not dependent on our consciousness. They operate when we are asleep or under the surgeon's anæsthetic. Such reactions include breathing, the pulsation of the heart, the processes involved in digestion, and many others.

Reflexes.—There are certain definite responses to the stimulation of sense organs that we commonly call reflexes. Among these are winking, jerking the hand when a bee stings it or a fly lights on it, and the "knee-jerk" by which your physician may test your nervous normality.

Instincts.—The term "instinct" is commonly used for more complicated tendencies to act characteristically in response to specific stimuli. The responses to stimulation are more indefinite than in the case of reflexes, but they are fundamentally unlearned and hereditary. As soon as an instinct appears it begins to be affected by environment. Physical and social factors conspire to modify and blend and redirect the complex instinctive activities of the personality. Some of these changes are undesigned and relatively fortuitous; others are planned by parents and teachers and constitute what we call education.

What education does with instincts.—It is the work of education to modify and control the instinctive tendencies of our pupils. Given a boy or girl with the full outfit of general native tendencies and with certain predispositions and capacities that are marks of individual personality, we are to encourage the development of worthy acts and attitudes and habits and ideals. There are several ways in which we may modify or control native tendencies.

1. We can *stimulate* or encourage them. For example, in the case of many of our pupils a tendency to thoughtful reasoning needs to be stimulated. Unguided instinct is satisfied with little thinking. We need to encourage our pupils to a purposive use of their reasoning powers.

2. We can *inhibit* or repress a tendency that is disproportionately developed. Such tendencies as express themselves in quarreling, fighting, and bullying should in many cases be inhibited. Remember, however, that all instincts are natural. None of them is morally bad until it is overdeveloped or underdeveloped with reference to all the other native tendencies, and the personality is thrown out of balance. For example, the tendency

to overcome opposition is described by McDougall as having had a chief part in social evolution. It is still needed, and will be, as long as the Christian world is confronted by great wrongs and evils. It should, however, be held in check, kept in harmonious relation with the other instincts and regulated by judgment and thought.

3. We can redirect or *sublimate* an instinct so that it expands its energy in a new way. Thus the tendency to overcome opposition may be directed in the interest of human service rather than used for the injury of others. The tendency to fear may be modified into awe or reverence. The parental instinct in the childless woman may be sublimated into an active interest in hospitals, orphanages, or other institutions of relief. The energies shown in the destructive activities of a gang of boys were redirected by Jacob Riis in the interest of co-operation with the police in keeping the neighborhood orderly.

Contradictory characters.—In many persons there are traits or characters that seem inconsistent with one another.[5] These so-called "contradictory characters" may alternate, succeed one another more or less rapidly, or they may seem to be simultaneous. Thus the same person may appear to be brave and timid, or retiring and self-assertive, and the mixture of these opposing traits makes his personality seem paradoxical and erratic. There may, indeed, be unwholesome inconsistencies in personality, but contradictory characters do not necessarily mean an abnormal mind; in fact, they often mean that one is a strong and vigorous personality, whose impulses, if they are properly guided and controlled, may be most effectively used for the social welfare of society.

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[5] *The Psychology of Early Adolescence,* Mudge.

A careful student of the psychology of Martin Luther[6] has discovered in that hero of the Reformation a large number of contradictory characters that marked the high energy of his impulses. Sometimes he appeared timid, at others brave; sometimes he seemed "hard-headed" and skeptical, at other times he was superstitious and credulous; sometimes he was gentle and sympathetic, and at other times petulant and unreasonable. The strength of the man lay in the balance of these impulses and in the vital energy that was expressed through them. Every strong personality has within himself the potentialities of a saint or a demon. Paul describes the struggle between contending forces within him.[7] Browning pictures the victorious knight who stands secure, though beneath his feet he can feel the squirming of the dragon. The secret of the man of power is not freedom from strong or contradictory impulses, with their possibilities of overdevelopment, but it is his control over these impulses and his power to keep them in balance. It is said that George Washington once expressed his agreement with a man who asserted that Washington had a tremendous temper which he kept under remarkable control.

The tendencies we find in our pupils.—The trend of modern psychology is away from the setting apart of active tendencies as so many specific instincts. The tendencies we discover are often of a mixed origin. Their basis is instinctive but there are environmental elements that affect them almost from birth. John B. Watson has pointed out that a boy does not inherit his father's specific capacity for fencing. He may, however, have a slender build similar to that of his father, and his father, by familiarizing the boy with swords and talking of swordplay, may develop in him a "slant" toward swordsmanship. The boy also may have inherited a nervous system that responds quickly, and he probably has a normal desire for approbation, a love of active movement, an interest in competition, a desire for mastery, and many other elements that may be encouraged by his father's training. Thus many boys follow the professions of their fathers.

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[6] *A Psychological Study of Lutheranism,* by Paul H. Heisey.

[7] Rom. 7.

A study of your pupils will reveal to you a large number of tendencies that are available for your use. By directing these intelligently you can help your pupils to develop the balanced personality that will make them socially efficient. By directing the instinctive tendencies of a generation intelligently great transformations in society might be wrought. You will find that your pupils have a tendency to oppose others and also a tendency to sympathy and co-operation. They are egoistic but they are also altruistic. Sometimes they desire solitude, at other times they are eager for society. They generally desire the approval of their fellows. They like to play. They are imitative and suggestible. They develop characteristic sex attitudes, especially in adolescence. Fear and curiosity and many other tendencies are common to them. What they do with these tendencies depends in great degree upon education.

PROBLEMS

1. What forces determine one's character and behavior? To what extent can these forces be controlled?
2. Why do educators place so much emphasis on the environment of child life?
3. How can the love of approval be wholesomely used in the interest of school discipline?
4. What use can a teacher make of the migratory instinct or impulse to roam?
5. One of your pupils is unduly self-assertive. What can you do to correct the fault?
6. How can bullying and teasing be eradicated?
7. Have you any supra-normal pupils? How can their peculiar needs best be met?
8. Should a teacher give more time to the dull pupil than to the average pupil?

BOOKS FOR FURTHER STUDY

Childhood and Character, Hartshorne, Chapter IX.

Readings in Educational Psychology, Skinner, Gast, and Skinner, Chapters IV and VII.

Psychology, Woodworth, Chapters, V, VI, VIII.

Introduction to Psychology, Seashore, Chapter XV.

A Social Theory of Religious Education, Coe, Chapter X.

Feeble-Mindedness; Its Causes and Consequences, Goddard.

Educational Psychology, Thorndike, Vol. I.

Psychology of Childhood, Norsworthy and Whitley, Chapters II, III, IV.

CHAPTER III

THE ACTIVE LIFE

The nervous system and the vast number of muscles through which its energy is expressed are essentially active. In life the human body is never absolutely motionless. Even in sleep the muscles controlling heart, lungs, and other visceral organs are constantly at work. Of course all muscles require rest,—the heart gets its required relaxation between beats—but there is always activity in some part of the organism. The muscles over which we have some control are more active than we may realize. As an experiment, try to sit for five minutes without moving your toes. A little observation of yourself and others will make clear to you that even in rest we are not absolutely relaxed and motionless.

The activity of childhood.—Normal childhood is vigorously active. It is an outworn and unscientific pedagogy that expects a schoolroom to be always quiet. In fact, the room in which children are most attentive to mental activity is not often a room where you could hear a pin drop. Observe such a busy group of children, hard at work with their lessons, and you will discover a wide variety of active movements. Their little bodies are unconsciously twisting and squirming. Their legs and arms are in motion. This is not disorder but an indication of real mental effort. The rigid and silent group, held to motionlessness by the discipline of an old-time school-teacher, is not an efficiently working group. Too much attention is focused on the difficult problem of keeping still to have much energy left over for study.

Muscular activity is naturally satisfying and enjoyable to children. Every sense is active and hungry for activity. Sometimes the eager child becomes quite fatigued before he realizes that he is tired. Constant activity is necessary to satisfy the muscle-hunger of childhood.

Of course it takes time for a child to learn the co-ordinations of mind and body involved in the use of the small muscles. There has been widespread acceptance for the theory that children should first use the large muscles and that their nervous systems might be injured by the use of the muscles active in the finer co-ordinations. Recent experiment, however, seems not to support this theory. It is important, whether the large or small muscles are employed, that children should not carry their activity to the fatigue point.[1]

All the senses are involved in a child's hunger for sense-experiences. He likes to be the cause of all sorts of things that affect his own sensation. He enjoys the noise of drums and trumpets, an interest that can be utilized in the training of his æsthetic appreciation. It is possible that he may have some sensations that are later lost, such as the action of the taste-buds in the mucous membrane of the cheeks. These taste organs, which later disappear, may possibly account for the common tendency of children to take large mouthfuls. The "round eyes" of childhood are symbolic of the eagerness of the child for experiences in seeing, as well as of the early development of curiosity. But the chief joys of childhood seem to be in the muscle-sensations. Children love to run, leap, roll on the ground, climb trees and imitate as far as possible the delightful and dangerous performances of the circus.

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[1] *The Psychology of the Preschool Child,* Baldwin and Stecher, p. 197.

The activity of adolescence.—Adolescence, like childhood, is a period of muscle-hunger, but there are various changes in the physical organism as well as in the social environment that occasion some characteristic differences. Early adolescence is usually accompanied by a relatively rapid growth of the larger muscles. These demand vigorous activity, such as is found in athletic games. At the same time there is a development in the control of the smaller muscles that parallels an interest in developing skill in their use. There is a rapid widening of the fields of activity to include a great variety of athletic games, skill in construction, handwork, playing musical instruments, painting and drawing, and many other activities that satisfy a multitude of individual and social interests.

The Spirit of Play

From the standpoint of the teacher one of the most important elements in human nature is the tendency to play. Serious-minded people once thought of play as a frivolous and unnecessary waste of time. We are beginning to recognize it as a wise provision of nature for the wholesome training and development of life. True play is free activity for its own sake, activity in which we partake for the joy of it. It serves other ends, however, than mere enjoyment of the passing moments. It prepares a child for life. It introduces him to a multitude of activities essential to his well-being. It leads to the skillful co-ordination of muscle with mind, the use of tools, and the development of the wonderful complex of intellectual and emotional habits that will be essential throughout life. One eminent psychologist expresses the conviction that without play there would be no normal development of the intellectual, emotional, or volitional elements of life.[2]

The form of play is determined by many forces. Perhaps all the instincts contribute to determine it. The parental instinct, which begins its development early in childhood, is doubtless to be credited with the universality of doll play. When not deterred by social pressure, small boys are quite as fond of dolls as little girls. The tendencies to be active, curious self-regardful, interested in groups of other humans, tendencies to fight, as well as to speak, walk, run, and even to be afraid—all these have their part in determining the form of play.

In general, those activities which are simplest, most elemental, and biologically oldest, take the chief place in play. Probably the more elemental activities afford a superior degree of relaxation from the intensity of our modern life.[3] Adults in play come closest to the attitudes and feelings of childhood and find relief in active games and sports not widely different from those of childhood.

Learning through play—The educational value of play is becoming more and more recognized. Not only does play often assume the form of useful skills, such as developing the motor co-ordinations involved in games, learning to walk, sing, construct, etc., but it may be so utilized as to direct the instinctive tendencies operating through it. The basis of education is the complex of original tendencies with which a child is endowed. We may so encourage the development of certain tendencies through play as to largely direct the processes of improvement. This fact is illustrated in the experience of such organizations for adolescents as Scouts, Camp Fire Girls, Girl Reserves, and others in which a wide variety of interests and skills are developed through a recreational program.

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[2] *Introduction to Psychology*, Seashore, p. 273.

[3] *The Psychology of Relaxation*, Patrick, p. 477.

Observation of an infant may illustrate how large a part play has in education. Learning is largely through play at first. The baby learns to talk through the delightful process of making all sorts of vocal sounds, not from any sense of responsibility but merely in the spirit of play. Similarly, he learns to manipulate his toys, to sing, to walk, to use a spoon. Later, although the element of relatively unpleasant effort must enter into his activities, he learns many of his most important lessons through playful activities. In fact, even for adults, a large part, perhaps the chief part, of effective learning comes through the spirit of free self-expression rather than through a painfully effortful process of work. Much activity that we call work is really play and sometimes what seems to be play is really actual drudgery.

Types of play.—As the instinctive interests of children develop and are modified, the forms of their play are correspondingly changed. In *infancy* there is a keen delight in the mere fact of sense activity. Simple stimulations of the senses, caused by a rattle, a bright-colored toy, or a fragrant flower, bring immediate reactions of pleasure. There is special delight in being the active cause of loud sounds or energetic movements. Active muscle play develops early and as soon as the baby can handle and manipulate objects he is interested in getting everything he sees into his hands. He insists on "seeing with his fingers." His play is largely a series of experiments with various sensory and muscular activities. Most of it is relatively formless. He likes to play with other children, but in infancy there is little co-operation. In fact, several years must pass before co-operative games have much meaning for him. He develops very early a jealous attitude with reference to his own toys, although he is slow in appreciating the property rights of others.

Early childhood is like infancy in that the chief business aside from eating and sleeping, is play. This is a period of dramatic and imaginative play, utilizing all the interesting things children have observed. They imitate railway trains and boats, horses, dogs, and bears. They re-enact the scenes of housekeeping, the Sunday school, the visit of the physician, and the activities of the traffic officer. Their first stories introduce them to a wonderland of fairy tales, Mother Goose, and a multitude of interesting characters, and these are all represented in their play. Besides these imitative expressions their powers of imagination introduce more original elements into their play, which is frequently shared with imaginary playmates. In the case of one of my own children, a child who had been a neighbor, but had apparently been forgotten, except as a name, became an imaginary playmate who had to be considered in all the child's plans.

The play of early childhood, like that of infancy, is individual, with little of collaboration or group activity. Still, these little folks love to be with other children and there are tendencies in the direction of social conduct. The group games of the kindergarten age are chiefly those rhythmic activities that are repeated simultaneously by all the children. Games in which they walk or skip about in a ring are delightful, especially if they are connected with strongly rhythmic music. The element of rhythm in stories is interesting. The classic rimes of Mother Goose and other stories of similar construction are generally appealing. It is in this period that children are fond of repeated stories. They will listen attentively to stories they have heard dozens of times before and will check the story-teller promptly if any variation from the traditional form of the story is introduced.

In *middle childhood* there is a rapid widening of the circle of a child's interests and hence a greater variety of types of play. Children are increasingly interested in games of skill, top-spinning, playing marbles, ball games of various kinds and a wide variety of group games. There is an increasing spirit of rivalry. The winning of a game has a significance that was not recognized a few years earlier. The development of social interest can be clearly seen in increased co-operation in the planning of games by groups.

There still continues the high joy in physical activity. Children often play so vigorously during this period that at night they are decidedly fatigued. This is especially true of some nervous children who may have too little reserve energy for a full day of incessant activity. While the fighting tendency may be observed all through infancy and early childhood, it usually develops with special vigor in middle childhood. It should be remembered that even middle childhood has still relatively few inhibitions. An impulse is more likely to express itself fully than in later periods. So if an occasion for anger arises, as when another child trespasses on one's rights, or seems to do so, there is likely to be an immediate attack. Even at this age differences of temperament appear and the overgrown bully makes life unpleasant for the timid child.

There is a growing interest in handwork, writing, drawing, and the other forms of simple construction that are employed in our schools. The dramatic interest of early childhood has by no means disappeared. It is further stimulated by the books our children are beginning to read. The action of these narratives is frequently imitated in their play and the whole round of experience with the world's activities becomes material for free dramatization. Children play store, play school, play soldier, play church and even make a play of their fragmentary experiences with sickness and death.

Later childhood carries farther the changes in the modes of play which we have seen in middle childhood. The majority of the games of this period involve physical activity. The play group is apt to be noisy. There is a growing interest in such games as baseball and volley ball, that are played according to rules. Incidentally, it may be said that there is an increasing consciousness of the existence of rules, although they are readily broken. Boys and girls are interested in competitive stunts and trials of skill or strength.

At the same time there is a growth in interest in quiet games involving memory or other forms of intellectual skill. Puzzles, conundrums and verbal tricks are prominent in the list of play interests. The collecting interest, that began to be prominent in middle childhood, continues to grow. Both boys and girls love to hoard up their favorite sorts of treasures. A boy's pockets usually contain an assortment of trophies and his room has a still greater number. There is often vigorous rivalry between children in the building up of collections and some shrewd bargaining for choice marbles, canceled stamps, pictures, etc.

As this is the beginning of the "gang period," play is largely modified by social forces. But life is still largely self-centered. The boys like to play baseball, but they are not well qualified for team play. Each boy wants to be pitcher or catcher, to make "grand-stand plays," to attract attention to his personal skill. The sacrifice hit is not characteristic of the baseball player of ten.

Early adolescence.—A large part of the play of early adolescence is physical play. Boys and girls of this age, with their rapid development of muscle tissue and nervous energy, are subject to a muscle hunger or a muscle intoxication that greatly affects their play. They enjoy the free exercise of the large muscles and are beginning to acquire facility in the finer muscular co-ordination. They delight in athletics, in walking, running, rowing, swimming, and dancing, and in romping and horseplay. Unlike children they delight in putting the last ounce of energy into a game. They need sympathetic guidance and a wholesome outlet for the nervous energy that must be released in some sort of physical activity.

Play for later periods.—Play is not a phenomenon of childhood only, neither does it end with adolescence. It normally continues throughout life, having various forms and various manifestations according to age, social conditions, and other limiting situations. Recent years have been demonstrating more and more the value of play for young people and adults as well as for children. Nature provides through play for the pleasant restoration of worn and fatigued bodily tissues and nerve cells and for the resulting degrees of energy expressed in bodily or mental activity. Play of the wholesome type is essential recreation. It is a restoration, a revivifying of the organism. Modern civilization perhaps more than that of any previous period in the world's history is marked by a high expenditure of nervous energy. Ours is a time of intense living, of nervous activity which is a constant drain upon the supporting organism. To offset this drain there must be some type of restorative process. Plenty of sleep, good food, fresh air, and other hygienic and sanitary provisions co-operate in this restoration. But in an era of high nervous tension such as apparently characterizes our own time, in this country, there is special necessity for play.

Toys.—The ideal toy for a child is one on which, to use the words of Kate Douglas Wiggin, "he hangs his glowing fancies." Our modern toys are too complete, too realistic. They leave little for the hungry imagination. Toys should be such that they will stimulate the imagination and direct it toward socially desirable reactions. There is potential harm in toys that direct the imagination toward deeds of violence, such as toy soldiers, cannons, tanks, swords. If we are to breed a generation of peace-lovers, we must not attract them by the toys of childhood to the imagery of war. Toys should be durable, sanitary, washable if that is possible, stimulating to the imagination, and adapted to the age and development of the children using them. The following brief list of inexpensive and appropriate toys for various ages may be suggested:

Infancy.—Silver spoons, clothespins, tin cups and plates without sharp edges, rubber or celluloid dolls, blocks, spools, bucket and large spoon for use in a sand box.

Early childhood.—Substantial dolls, wooden doll furniture, blocks, rubber balls, picture books, kiddie car, wheelbarrow, whistle (if not too harsh and shrill), small broom, toy carpet sweeper, flat-iron, blackboard, garden tools.

Middle childhood.—Small musical instruments, ball and bat, marbles, jackstones, dolls and their dresses and furniture, stamp album, construction materials such as modeling clay, drawing and water-color books, building blocks and the various mechanical construction outfits, roller skates, sled, coaster wagon, tricycle, books.

Later childhood.—Construction outfits, dominoes, checkers and similar games, tennis outfits, jackstones, football, puzzles, bicycles, equipment for carpentry, dressmaking, and fancy work, electric toys, camping equipment, painting outfits, books.

Early adolescence.—Many of the play interests of later childhood hold over in early adolescence. In addition to the toys mentioned in the preceding paragraph there is great interest at this period in all sorts of athletic and gymnasium equipment, rowboats, model sailboats, fishing tackle, musical instruments, more advanced outfits for printing, carpentry, embroidery, and sewing.

The value of play.—Not only for children but for all of us play has distinct value. For the man or woman it affords relaxation and a profitable respite from the busy cares and nervous tensions of our days. Such men of great responsibility as Lincoln and Roosevelt and Wilson owed much to their habits of relaxation in the spirit of play. There are plenty of tasks that must be done by voluntary effort and hard work, and children should learn that certain tasks and responsibilities must be undertaken, whether agreeable or not; but the habit of attacking real problems and tasks in the play spirit is one to be encouraged. It is in this spirit that a task that would otherwise be drudgery may be made bearable. We should not consider play to be outside our educational resources. Our plans for our schools are not complete without a definite and sufficient place for properly supervised play.

One aim of education should be to develop a wide range of interests, so that the play spirit may express itself in a broadly educational use of leisure. The play of childhood should include elements of training in the appreciation of music, of natural beauty, of pictures and beautiful buildings and good poetry. Already many of our children have been very seriously injured, indeed permanently harmed, by ill-adapted or vulgar or evil-suggesting motion pictures. One of our most insistent tasks is to develop up to its moral and educational possibilities this agency for attractive visual education.

The play world.—When children propose to engage in free dramatic representation they say, "Let's play." We shall never understand a child's play until we appreciate in some degree the world in which childhood lives. The children about us engage in activities of which we are seldom aware, unless something arouses our own recollections. There is a child vocabulary that seldom reaches adult ears. There is a child imagination that differs utterly from our adult picturings, save as we retain some of the spirit of childhood.

There is a child folklore that seldom comes to our attention, except in such rimes as "Bean porridge hot," "London Bridge is falling down," "Here we go round the mulberry bush," "The farmer in the dell," "Miss Jennia Jones," "King William was King James' son," and similar jingles associated with childish games. Many of these are almost unknown to the adult world, but they are part of the heritage of the children, passing from one generation to another through the channels of child society. Do you remember the nonsense jingles used in "counting out" games? Some of these begin as follows:

"Eeny, meeny, miny, mo."

"Ibidi, bibidi, sibidi, sap."

"Ery ivry, ickory, an."

"One, two, three,
Out goes he."

"Monkey, monkey, bottle of beer."

"Engine, engine, number nine."

"One, two, three, four, five, six, seven,
All good children go to heaven."

"Intra, mintra, cutra, corn."

These and many similar rimes belong exclusively to the child world. They are probably child-invented and have been transmitted without aid from adults through many generations of children. Perhaps some elements of our adult folklore may have come originally from the child world. At any rate the writer has discovered a nursery jingle, still familiar to children, that is essentially the same as an allegory that modern Jews repeat as part of their Passover ceremonies.

TRAINING FOR WORK

The most effective work is done not in the spirit of grudging necessity, but freely and joyously. In fact, it may be said that work at its best is closely akin to play. This is especially true of such creative work as that of the scientific investigator, the painter, or the writer. It is measurably true of the most efficient farmer or merchant, or even of the day laborer. Many of our Negro deck hands or wharfmen and the Greeks and Italians who work in railway construction gangs seem, to judge by their songs and attitudes, to do much of their work in the spirit of play.

Not all work, however, can be made so entirely free and spontaneous. There is an element of serious attention to the results of effort that must stimulate most of us to do our part of the world's work. It is important that we learn how to encourage our children and young people to put forth honest effort and attain the values of labor. Even children should learn to work and should realize that

> "We are not here to play, to dream, to drift;
> We have hard work to do, and loads to lift."

This does not mean that children are to face work as drudgery. There are joys in the accomplishing of hard tasks that afford the purest of pleasures. The habit of faithful effort, properly motivated and consciously related to valuable results to be attained, is not a curse but a blessing. Encouraging children to do household tasks or to co-operate in the tasks of church and school for the sake of results beyond the activity itself is of the highest educational importance.

PROBLEMS

1. How does play differ from work?

2. Should children ever be required to perform uninteresting tasks?

3. To what extent are games educational?

4. What play activities would you select for a group in
    (*a*) early childhood?
    (*b*) middle childhood?
    (*c*) later childhood?
    (*d*) early adolescence?
    (*e*) middle adolescence?
    (*f*) later adolescence?

5. How can play be utilized to teach children lessons of health?

6. Why do we call a drama a play?

7. What value has dramatization in religious education?

8. How can you help your pupils to be happy in doing hard tasks?

Books for Further Reading

The Psychology of Relaxation, Patrick, Chapter II.
Psychology in Daily Life, Seashore, Chapter I.
Introduction to Psychology, Seashore, Chapter IX.
The Psychology of Early Adolescence, Mudge, Chapter VIII.
Readings in Educational Psychology, Skinner, Gast, and Skinner, Chapter XVII.
Psychology, Woodworth, Chapter XX.
Childhood and Character, Hartshorne, Chapter XV.
Play in Education, Lee.
How Children Learn, Freeman.
Interest and Effort in Education, Dewey.

CHAPTER IV

HOW OUR PUPILS LEARN

The human body is provided with a variety of sense organs by means of which we come into contact with the world. Without these organs and the nerves and brain centers connected with them we should be able to learn nothing about the world outside us.

Sensation and Perception

If you hold an orange before an infant whose vision is strong enough to see it with some degree of clearness, he doubtless has a sensation of a bright color, but he does not see the orange *as an orange.* He must become acquainted with the fruit so that the sensations become laden with *meaning* before he can properly be said to see an orange. William James has called sensation "the first thing in the order of experience." But pure sensations, without any interpretative meanings, probably seldom or never occur, except in early infancy. It is our constant tendency to give meaning to any group of sensations and thus develop what is called a perception. Because we have experienced the color, form, odor, taste, and other sense qualities of an orange, when any of these experienced sensations again occur we usually perceive an orange.

Meaning.—As our experience grows the meanings of things become richer and deeper. When my dog looks at a flower it is probable that he gets some sort of sensory impressions, similar to mine, although it is possible that he does not see its colors so clearly. Perhaps in some sense he perceives the flower, but it has for him no such meanings as it has for the little child who goes flower-gathering. The flower has similarly a very different meaning to a botanist or an artist or a poet than to the child. Meaning, in other words, is a personal and individual interpretation of any experience. Our minds will take a very slight impression and interpret it as a symbol of something much more complex. For example, a few pen strokes by a clever artist bring to the mind of most of us the idea of the figure of a person or an animal.

Encouraging new experiences.—It is said that there is none so blind as he who will not see. At any rate, what we see or what we perceive through any sense largely depends on ourselves. We can train ourselves to perceive those things which we consider more worth seeing. The writer at one time searched a field for Indian arrowheads. This was a new experience to him, but with him was a young man who had had experience in finding arrowheads. Which of the two do you suppose discovered the more arrowheads? We are apt to see what we expect to see. The artist sees beauty all about him, even in the flat and commonplace regions in France where Millet and other artists of his famous school did their painting. Some people may visit sublimely beautiful scenes without recognizing them as beautiful at all. Evidently, a great part of education consists in training persons to see what is most worth seeing, to hear what is most worth hearing, and to use their perceptions altogether in the interest of their higher personal development.

What a child sees.—In literal fact the world is very different to a child from what it is to an adult. The child's world differs from ours because he lacks our experiences, our training, our habits of adjustment. To an infant the world must be, as William James expressed it, "a great, blooming, buzzing confusion." He cannot see the order and design in art and nature about him. His sensations are blended and mixed without meaning, so far as his developing mind is concerned. It is only as he follows the instinctive desire to exercise his senses, as experiences follow one another with some orderliness of recurrence, that the world begins to acquire meaning. He soon learns to recognize the taste of milk, the bright-colored and noisy rattle, the face and figure of his mother. If he is mentally normal, his acquisitions of meaningful perceptions will be rapid. But it will require long years to acquaint him with some things that are perfectly familiar to his parents. The failure to recognize the limitations of a child's experience have often produced sad effects in the religious education of our boys and girls. We have required them to memorize meaningless phrases, to participate in what are to them utterly meaningless forms of worship, to sit quietly by the hour and listen to sermons quite unintelligible to children, and then we have wondered why they did not develop an interest in religion and the church.

The development of meaning.—The growth of meanings in the minds of children is very interesting to observe. Gradually and constantly by remembered experiences they are adding to their knowledge of things new images and associations—all of which must enter into their picture of an object under their observation. The pictures that children draw illustrate the growth of meanings. At first there are few elements in their crude sketches—a man may be symbolized by a circle for a head, lines for arms and legs and dots for eyes. The child has put into his picture only the conspicuous elements which he recognizes. His vision is as keen as yours but he does not *perceive* all the details that he *sees*.

The personal nature of meaning.—The meaning of things is never, even in adult life, reduced to uniformity. Our senses differ. Probably a given color produces a slightly different sense impression on you than it does on any of your friends. Some are color-blind. Our experiences, with reference to any given thing, are different. To one a garden is a place of beauty, to another it is a tiresome bore. A rock is to one man a building-stone, to another a thing of beauty in form and color, and to still another a piece of useless trash to be thrown away.

Meaning in education.—It is very important that the teacher shall know what meanings are associated with objects, words, and ideas in the minds of her pupils. Experience differs widely with environment, and teachers frequently assume that their pupils are familiar with things of which they know little or nothing. A primary teacher on the plains of the Northwest once said she had great difficulty in securing supplementary reading dealing with things familiar to her pupils. There were no sheep raised in that region, so lambs were no more real to her pupils than the chimera. There were plenty of stories telling of trees and rippling brooks, of daisies and buttercups, but her pupils knew elmost nothing about any of these things.

Connecting the new with the familiar.—Another important educational principle is, *new knowledge must be connected with what is already in the mind.* It acquires meaning as its relation to other things, previously meaningful, is clearly seen. New experiences acquire meaning according to our past experiences. As children grow, their minds become stored with great numbers of images that rush forth, as one writer puts it, as a "reception committee" to welcome the incoming new experience. It is important that the teacher shall know as fully as possible what is already in the mind of his pupil. Unless we study our pupils to learn the extent of their experience we are certain to use words and ideas with which they are unfamiliar. The reader will doubtless recall from his own experience with children many cases of misunderstanding and of blundering attempts to use unfamiliar words. One man in middle life can recall how puzzled he was with an expression used by his father in saying grace at the table. He would express gratitude for "the food in readiness for us." The boy not understanding the unusual expression, "in readiness," and taking it to be one word instead of two, this part of the expression of thanks was long meaningless to him.

It will be worth while for any church-school teacher to study carefully the extent of the vocabulary of familiar and usable words held by her pupils. For example, a primary teacher should not be satisfied to have her pupils repeat glibly the twenty-third psalm until she has tested their familiarity with its words and phrases. Have your pupils a clear picture of what a shepherd is? Do they know the significance of the word "want" as used here? To our adult minds this psalm, while profoundly significant, is simple in its language. To the primary child it may be very difficult. Are your pupils all familiar with the following words, as used in the psalm: restoreth, righteousness, sake, evil, rod, staff, comfort, preparest, anointest, mercy, and dwell? To some city children the word "path" may be unfamiliar, and the entire psalm is full of expressions that should be carefully interpreted to children.

The normal child in the junior years has acquired a large vocabulary of words that he can read with at least an appearance of intelligence in their connection with other words. Do not be misled by this fact into thinking that he understands the meaning of all the words he pronounces correctly. Remember also that the Bible is an ancient book whose forms and figures are very different from ours and that it was not written for children. A ten-year-old girl often reads a Bible passage as part of the morning worship of her family. While she has a normally wide vocabulary, it is noticeable that she stumbles at many words and phrases that to her parents are simple. The teacher of juniors should know as clearly as possible what words and ideas are already in the minds of her pupils.

When a new word or idea is to be introduced to your pupil, be sure that there is some connection established between it and what is already familiar.

Suppose the biblical word "steward" is used in your class session—what does it mean to your pupils? Some of them might understand the word better if a steward is compared to a bank cashier; others can best understand it in comparison with a grocer's clerk or the man who carries on the business of a farm for its owner. Suppose a missionary lesson contains references to money in terms of pounds or lira or francs. Make sure that these terms are interpreted in relation to our own coinage.

Teachers of adolescent boys and girls, and even teachers of college students, should be familiar with the extent of the experiences, words, and ideas of their students. I have known university freshmen who had only the vaguest idea of the location of India. It is important that every teacher shall make a practical diagnosis of the information of his students.

ASSOCIATION

We have mentioned the necessity of connecting the new with the old in learning. This putting together process is called association. Association is fundamental to all learning. It is the tendency of mental experiences, having once been connected in consciousness to remain together. We shall consider certain principles that determine the relative strength of associations.

1. *Primacy.* The fact that an association between a given mental experience and another is its *first* association or connection tends to make it correspondingly strong. Thus if the first time a child offers a gift to an adult it is accepted with a "Thank you," and as soon as the child can use the words he

is encouraged to say "Thank you" on receiving a gift, the association of thanks with the receiving of a gift is encouraged.

2. *Intensity.* A second principle is that of intensity. An intense association tends to be correspondingly lasting. Thus a child who has from the first associated toys or sweets with sharing and has been generous with other children may develop a new and less desirable association through a single, intense experience of being denied participation in some pleasure by the selfishness of another child.

3. *Recency.* The more recent association tends to obliterate or counteract the earlier ones. Thus we have an opportunity, in the plastic stages of childhood and youth, to supersede the earlier and less desirable associations with new truths and attitudes.

4. *Frequency.* The fourth principle of association is that of frequency or repetition. As an association is repeated it tends to become stronger. This is true whether it is involved in learning a hymn or in developing a habit of expressing gratitude for favors.

The ideal application.—Each of the above principles of association is very important. The ideal for religious education should include at every point where learning is desirable a combination of these principles. If an important religious truth is to be learned, it is well that it be learned early enough to prevent any harmful associations from making a prior appearance (Primacy). The association should be made strongly and positively enough to make a vigorous impression (Intensity). We should not be satisfied with early associations but should seek to deepen the connection anew (Recency). We should also remember the value of repetition and add to the strength of the association by reiteration (Frequency).

Forming a mental association between two things is somewhat like making a path through snow or even soft earth. Interpret the principles given above in terms of path-making. Would a large man or a small man make the better path? One man or many men? The man who comes this way today or the one who came yesterday? The man who traverses the path only once or the man who passes over it several times a day?

How our feelings affect association.—The work of a teacher may be expressed in terms of encouraging certain associations in the minds of her pupils and discouraging others. For the laws of association apply not merely to the connection of words in memory but the connecting of words with deeds, of situations with active responses, of behavior with ideals. We shall see that the principles of association, as stated above, apply to memory, to imagination, and to all the habits that we seek to develop in the lives of our pupils. Much depends upon the relation of the emotional life of our pupil to what he is learning. It is a natural tendency to prefer to think of the pleasant things and shun the unpleasant. The feeling element in association is therefore of very great importance. If our pupils gain great satisfaction in working out a problem, they are not only getting one of the finest pleasures in life, but are also strengthening the associations that are involved in learning. A cheerful mood is a decided aid to learning. A melancholy mood may complicate the learning process with a feeling of despondency that will hinder its effectiveness.

Association of groups of experiences.—Perhaps it is seldom that an element in the mind of our pupil becomes associated with only one other element. Most things bristle with associations. When we try to recall a word or an idea we often can trace a considerable number of ideas and feelings that are related to it. For example, let us suppose that I am trying to recall the name of the publisher of Webster's dictionary. This name I have forgotten, in the sense that I cannot bring it immediately to mind. I have not forgotten it in the sense that I will not recognize it when I see it or hear it. I try by various associations to bring it into consciousness. I feel that its limit is two syllables, possibly three. I have vague visual associations that indicate that it has perhaps six or seven letters and that its initial letter is a rather large letter, probably not I or J; more likely M or W. There is also an emotional connection with some word with the idea of joy or happiness in it. I am inclined to think it is a biblical name or a name similar to one in the Bible. What are some of the biblical names beginning with M or W? Mary is like "merry," but it is not a long enough name. Perhaps it may be Miriam. Here I discover another association which is the resemblance in sound between the given name Miriam and the surname Merriam, and the name I have been seeking is recognized. It has been found, not by a single, simple process, but by the combination of a series of associations.

Association and meaning.—The difficulty of subdividing psychology into different departments of mind is seen if we try to distinguish association from perception in any absolutely clear-cut, exclusive way. Perception is the process of interpreting or giving meaning to sensations. But association is also a process of giving meaning or value to ideas. We must associate an idea with another idea before its rich meaning is possible. So we may say that without association there can be no meaning for anything. Developing associations is an educational process—associations in perception, associations in judgment, associations in our emotional life, associations affecting our behavior. All of these are of very great importance to all educators. It is our work to develop the most wholesome type of association so that our pupil will, in a given situation, respond with the right kind of associations and the right kind of reactions.

Individual differences.—We shall find wide differences in our pupils in their powers of association. Some of them form associations quickly and hence can remember with relative ease, while with others associations are made more slowly. The associations made by our pupils will vary widely in meaning, depending upon many personal and social factors. Some associations are worth little, while others are of very great value. We must largely determine the type of associations which our pupils experience. For example, there are some church-school classes for boys in which the attention of the group is fixed upon matters that are relatively trivial—interesting and useful in their place but not closely related with the deeper needs of the pupils. In other classes the serious problems of the pupils are brought into attention or discussed in a wholesome and interesting way and the class becomes a most practical agency for training.

The occasion for learning.—The lower animals have relatively little capacity for learning, although some horses, dogs, and other animals are capable of considerable training. But man is constantly meeting new situations for which there are no ready-made responses. Hence he has to learn. It should be remembered that in most situations there is some familiar element, but in the real learning situation there is something also that is new. As teachers we can put no idea in our pupil's mind. We cannot do his learning for him. We can suggest and encourage, and set the stage for his play; he must be the actor. His mind must be awake to the problem involved in the act of learning. It is important to realize that whenever a new situation presents itself our pupil engages in some sort of learning process. He may meet the problem with an *imaginary solution*, a sort of side-stepping into the realm of fancy; he may *rationalize* an action or try to build up a reasonable basis for what he wishes to be true, justifying it without thinking the matter through; he may fall back upon *prejudice;* he may *substitute* some other act for the one that should be forthcoming; or he may *repress* the whole problem, try to forget it without facing it. Each of these evasions of a problem is an act of learning, but they are generally unwholesome and may lead to serious consequences.

It will be seen that learning, as we have been discussing it, is something more than what we once called "learning a lesson." By that phrase we may have meant merely memorizing certain statements or fixing in mind certain relationships between ideas. The word "learning" is used for several other different processes. We speak of learning to ride a bicycle, that is, to acquire a certain skill. The formation of a habit, such as saying "Thank you," we call learning; and we also use the term for the process of getting information. For religious education all these learnings are necessary, but we should emphasize still another meaning, that of *adjusting one's behavior to the needs of a social world,* acquiring moral character. No amount of memorizing good literature, even of Bible passages, will make up for failure to adjust our conduct to the higher ideals of the kingdom of God. Religious education is to make us wise unto salvation, or, in other words, to develop the wisdom that improves our lives and adjusts them to the social needs of our world.

HABIT

A good habit is not some distinct element or structure in the mind of our pupil. It is the fixed association of a given type of reaction with a given situation. One of the most important results of religious education is to encourage the making of good habits by the repetition of right reactions. One of our difficulties is that we have so little time with our pupils; but if, systematically, we lead them to react wholesomely, willingly, and with right responses to the situations which they meet, we shall make it possible for them to accomplish something definite and useful. It is unfortunately not impossible for the school and its processes to be so far removed from life that the associations found are not connected with the important things of everyday experience. If school learning is to be valuable in forming character, the school must keep as close as possible to the home and play life of children. Teacher and parents will consult together frequently, and so far as possible the school will be a normal social environment for our pupils.

The strength of habits.—Few of us realize the number and tenacity of our habits. From the time we put on our shoes in the habitual order in the morning until we recline in our habitual posture at night, our day is a succession of habitual actions. There are habits that each of us holds in common with many others. For example, in this country it is a general habit—so general that we call it a custom—to walk on the right side of the sidewalk or drive on the right side of the street. In some other countries the general habit is to pass on the left. There are habits that are distinctive of the individual person, some of them consciously built up and others unconsciously acquired. Such are the characteristic habits of gait that enable you to recognize a friend long before you can see his face.

What a vast number of habits enlist the concern of the teacher! It is the business of the thousands of teachers, in church school and public school, to encourage proper habits of etiquette, kindness to others, attention to studies, regularity of study hours, behavior toward other people in all sorts of moral situations, even habits of reverence and openheartedness toward God. To complicate our task still further, we are not content to make our pupils mere trained automatons, even if this were possible, but free and self-determining builders of their own reasonable and wholesome systems of habit. If our pupils are to be free to develop new modes of thought and action, it is important that a large number of their responses to their environment shall be habitual, fixed and therefore easy. This desirable end is achieved most easily when the plastic periods of childhood and youth are fully utilized as the chief periods of habit building.

PROBLEMS

1. To what extent are your pupils interested in the news columns of the daily paper?

2. Make a list of the chief headlines of a newspaper. What proportion of the terms used in these headlines are familiar to your pupils?

3. A visitor in speaking to a small Sunday school used the word "summary." The superintendent suggested that many of the pupils might not know the meaning of the word. The speaker defined it by saying: "Summary, children, is synonymous with résumé or synopsis." What was wrong with his definition?

4. Take a familiar Scripture passage, for example, the twenty-third psalm or the Beatitudes, and find out how many of the words in it have clear meanings in the mind of each of your pupils.

5. What is the first thing that comes to your mind when you see each of the following words: good, unjust, million, prophet, Washington, Jerusalem, governor?

6. Can you trace the reasons for the connections discovered in Problem 5?

7. Why does an unknown language sound like a queer jargon?

8. Why do children make mistakes in using new words?

9. Are there any given names that you particularly like or dislike? Can you discover associations to account for your prejudices?

10. Why is it "hard to teach an old dog new tricks"?

BOOKS FOR FURTHER STUDY

Psychology for Teachers, La Rue, Chapter X.

A Social Theory of Religious Education, Coe, Chapter XIV.

Introduction to Psychology, Seashore, Chapters XV to XVII.

Psychology of the Junior High School Pupil, Pechstein and McGregor, Chapters V and VI.

Principles of Teaching, Thorndike, Chapter VIII.

Readings in Educational Psychology, Skinner, Gast, and Skinner.

Psychology, Woodworth, Chapters XII, XVI, XVII.

CHAPTER V

THE EMOTIONS AND FEELINGS OF OUR PUPILS

The meaning of life and its experiences for our pupil may be largely expressed in terms of feeling. What consciousness without feeling would be we do not know, nor whether such a thing would be possible. All our conscious states involve some element of what we call feeling. It is true that some adult minds seem to be dominantly intellectual and to attack their problems with an attitude of cold, systematic and almost mechanical reason, but even such a mind feels some sort of glow in achievement and distinguishes between the pleasant and unpleasant elements in its experiences.

Phases of the Life of Feeling

It is well that we become familiar with some of the terms that are in common use to describe the exceedingly complex experiences of the emotional life.

Affection. The term "affection" is commonly used for the most elementary form of the feeling life. All our mental states are colored by or mixed with what has been called affective tone, or feeling tone. Vague states of agreeableness or of disagreeableness mark every moment of our mental life. We can with difficulty describe them and usually are not conscious of them as separable experiences, but they are very complicated affective states.

It should be remembered that there are, in the central nervous system and the connected sense organs, millions of nerve endings. Some of these, for example, the rods and cones of the retina, are highly developed and specialized. All of them probably respond in some degree to some sort of sense stimulation. Many of these nerve responses are too slight to affect consciousness singly, but a great number of such responses to pressure, temperature, and other stimulations acting together may constitute an affective tone that is very important. In fact, the physical basis of feeling seems to be similar to that of the more clearly recognizable sensations. A very important element in feeling is the activity of the sympathetic nervous system, which is closely related to the digestive system, the glands, and other organs, so that their processes affect our feeling states very directly.

Feelings.—When we become conscious of an affective state we usually call it a feeling. Thus, the affective element in my attitude toward a color that I dislike or one that I like is a feeling. I like certain musical tones, certain odors, certain tastes, and I dislike certain other sensations. These reactions of my mind may be called feelings. It should be remembered, however, that the term "feeling" is frequently used for the whole range of affective consciousness.

Emotion.—Certain affective or feelingful states attain a relatively high intensity and express themselves in characteristic form. These are usually called emotions. There is a very close relation between emotions and instincts. In fact McDougall, one of our most thorough students of the instincts, considers the primary emotions to be the feeling aspect of the principal instincts. An instinctive action is related to a corresponding emotional state somewhat as the two sides of a coin are related. Instinct and emotion are two phases of the same process. It may be possible, however, to consider the emotional reaction by itself.

The history of theories of emotion is very interesting to the student of psychology. One of the earliest scientific students of emotion was Charles Darwin, who considered an emotion a state of consciousness that was developed, like an instinct, by certain situations that have been significant in the past life of the race. Thus violent struggles having once been necessary to survival, the conditions of anger now cause us unconsciously to clench our fists, make our hearts palpitate rapidly, and produce other bodily expressions of fear.

The so-called James-Lange theory denied that emotion was an inner state of which the physical changes were mere outward expressions. According to this theory, the changed heart-beat, changes in temperature and respiration, paleness or flush and other bodily changes themselves constitute the emotion. James insisted that our perception of a situation involving danger, for example, is followed at once by bodily changes such as accelerated pulsation or tensed muscles, and that our feeling of these changes constitutes the emotion.

The general principle of the James-Lange theory may be accepted, although as a complete explanation the theory has been found to be inadequate. The physical changes are not mere expressions of emotion but constitute distinguishing marks of the emotion itself. The relation of emotion to our racial past is reaffirmed by recent investigators who have also examined, more thoroughly than was formerly possible the actual physical changes that take place in an experience of strong emotion.

THE GLANDS

Closely related to emotion is the action of the various glands of the body, especially the so-called ductless or endocrene glands. The emotional life is decidedly affected by the normal or abnormal functioning of the liver, the pancreas, the gastric glands, and even of the sebaceous and salivary glands. But it is far more deeply affected by the action of the ductless glands that seem to regulate the emotions by their secretions that are thrown directly into the blood stream. The chief ductless glands include the adrenal, the pituitary, the thyroid, and the sex glands, each of which has a very important relation to the emotional life. Recent investigations of their functions make it clear that they have a profound influence upon all phases of physical and mental life. It is said that many of the acts of criminals may be directly traced to disturbed conditions of the thymus and other ductless glands. Indeed, the importance of the healthy functioning of these glands can hardly be overestimated.

The thyroid.—The regulation of the energy of the body is in considerable degree intrusted to the thyroid gland, located in the throat. If we have too much of the secretion of the thyroid gland, we spend our energy too rapidly. If we have too small a supply, we are lethargic. Abnormalities of the thyroid have serious effects upon bodily growth and vigor and upon all one's mental functions, including the emotional states. When an excess of thyroxin is thrown into the blood our emotions are overstimulated. The disease known as goiter is due to the overgrowth of the thyroid gland. In many cases goiter can be avoided by adding to the iodine content of food or water, iodine being an important constituent element in thyroxin. (This should never be done except under medical directions as to the proper amount.) There is danger, however, in too great a thyroid secretion. This condition, known as hyper-thyroidism, is sometimes induced by excessive emotion and it is said that one of the tragic after-effects of the world war was a great increase in the number of cases of hyper-thyroidism. Careful students have already noted a large number of characteristic effects upon the body and its processes of abnormalities of the thyroid and other glands.

The adrenal glands.—The adrenal glands are located just above the kidneys. They are very closely related to the more vigorous emotions such as fear or anger. Their probable relation to the normal developments of sex is suggested by the apparent association of abnormalities in these glands with precocious puberty or with the development in one sex of certain characteristics of the other. The substance secreted by the adrenal glands is called adrenalin, or adrenin. Its regular secretion is necessary to emotional balance and normality. When we become angry or are otherwise stimulated to emotional intensity the adrenal glands become unusually active and a larger supply of adrenalin is discharged into the blood. The result is an immediate toning up of the nervous system, the stimulation of the heart and the large muscles throughout the body, the redistribution of the blood, a rising bodily temperature and various other reactions. At the same time the functions of digestion and elimination are inhibited.

Under the influence of adrenalin the muscles may perform otherwise impossible feats. In time of danger men have lifted weights that ordinarily would have been beyond their strength. The reserve force of the nerve cells controlling the muscles is brought into action through the injection of adrenalin into the blood stream. Under the stimulus of anger or rage the adrenal glands and perhaps other glands in co-operation with them act efficiently in preparing for combat or other emergency, but they have a much wider purpose in adjusting the body to all the requirements of a vigorous emotional life.

Other glands.—The *pituitary gland,* located at the base of the brain, influences the involuntary muscles. It is claimed that the secretion of the pituitary acts as a tonic to the parts of the brain involved in the higher mental processes. The degeneration of this gland is said to have a variety of effects, such as causing sleepiness, dryness of the skin, loss of hair, and sometimes such nervous disturbances as epilepsy. Its excessive secretion may cause giantism. The *pineal gland* is another small gland at the base of the brain. In this organ Descartes thought the union of the physical system with the soul took place. It seems to be closely associated with general bodily development and with the development of the sex glands. The *thymus gland,* located in the chest, above the heart, seems to hold the sex glands in abeyance during childhood and to prevent undue precocity. The *parathyroids* are very small glands located near the thyroid. Although their secretion has never been isolated, there is evidence that it affects the excitability of nerves, regulating the nervous impulse as well as affecting the coagulation of the blood and the development of bones and teeth.

The various glands, whether with or without ducts, have profound effects upon the development of personality. The greatest of them all, *the liver,* affects the whole system by its normal or abnormal behavior, and we are well acquainted with the resulting effects on the disposition. The *pancreas* has an inner secretion as well as the fluid that it adds to the digestive process and is closely involved in the control of muscular and nervous energy. Puberty sees a rapid development of the activity of the *sex glands* and of many of the others as well. The harmonious functioning of all the glands is important to the healthful activity of the emotional life. The human organism is a delicate mechanism whose wonderful complexities are still being discovered by students of physiology and psychology.

The intimate senses.—Closely involved in the complicated mass of physical factors of our feeling states are the activities of the intimate, deep-seated senses, such as those of strain or temperature or pain, that act together in producing our general feeling-tone, especially those feelings that we describe as depression or elation. They are involved both in our temporary moods and in our more permanent temperaments and dispositions. In our more vigorously feelingful experiences of depression, melancholy, discouragement, or pessimism, we can recognize downward strains in the chest and abdomen, especially in the diaphragm. On the other hand, there are upward strains that are associated with cheerfulness, buoyancy, hopefulness, optimism. It is not insignificant that our pupil's shoulders are more erect when he is in a hopeful and cheerful mood than when he is downhearted.

THE DEVELOPING LIFE OF FEELING

The intimate senses above described are developed earlier than the sensations of vision and hearing. In the consciousness of a child intimate sense experiences are prominent, although they are vague and relatively unorganized. The happiness or unhappiness of an infant is as real and as actual a part of consciousness as is the happiness or unhappiness of an adult. Stimulated by certain unpleasant sensations, the infant normally expresses his displeasure with sobs and tears. In response to a different type of sensations, he expresses his pleasure, sometimes with quiet relaxation and at other times with vigorous movements, and after some time with smiles and laughter. The feelings develop throughout childhood and constitute a very important part of child nature.

The feelings and emotions of childhood differ quite decidedly from those of adolescent and adult life. The emotional states of childhood shift and change rapidly.

> "The tear down childhood's cheek which flows,
> Is like the dewdrop on the rose;
> When next the passing breeze comes by
> And waves the bush, the flower is dry."

It must not be supposed that the brevity of childish emotional reactions means that they are weak or insignificant. A child's sorrow is very real and so is his joy; and both, in spite of their transitory nature, have important educational bearings. The dominant emotional states of childhood may decidedly affect the nervous and emotional experiences of later life.

Another distinction between the feeling life of children and that of older people is that there is in childhood little inhibition of the emotions. Young children immediately respond to a given situation by the reactions of emotion. In the later periods of childhood they are beginning, in response to social pressure, to inhibit some of these reactions. The boy or girl who stumbles and falls develops pride in refraining from tears. The covering up of emotion begins to be noticeably characteristic in early adolescence and develops through the adolescent periods until in adult life most of us have acquired the ability to conceal many of our feelings.

In childhood there is a very rapid shifting of moods, the child being now cheerful and happy, and now angry and sulky. The duration of moods increases through childhood and at least into middle adolescence. The child has relatively brief periods of sulking, while adolescence frequently develops periods of settled moodiness or melancholy, which may last for some time.

The meaning of smiles.—In infancy a smile means something very different from one in later periods of life. The smile of a baby is somewhat like the expression of pleasure in a dog, whose entire bodily movements, most noticeable of which is the wagging of his tail, might be described as a smile. But the smile of infancy does not mean a sense of humor. It is an expression of pure pleasure, but not due to any consciousness of the ludicrous or incongruous as in the case of real humor. In fact, there is little of actual humor in the smiles or laughter of early childhood. A child of four was recently taken to the circus. She was deeply interested in the animals, elephants and ponies, but was very little interested in the clowns and apparently saw nothing funny in the antics which caused older children to laugh uproariously. Children's humor differs from that of adults.

Play for children is not frivolity and does not involve, for them, anything ludicrous. Many times they are puzzled to understand the attitude of their amused older friends. One young woman recalling her childhood says:

"My aunt offended me greatly once when I was a child by laughing at me because I cried when I thought my doll would take cold. I had taken her out in her buggy and I was sure she had taken cold, because I forgot to put her shawl on. My aunt laughed at me because I tried to give her some cough remedy. I was very angry at her until my father explained to me that she did not understand. After he had shown great interest about the doll I felt better." This same young woman tells of various childish fancies. She says:

"I thought when the wind blew softly that the fairies were pleased, and when it blew hard, they were angry. I also thought that the birds, flowers, trees, and animals could talk, and often wished I could tell what they were talking about. I used to wonder why my folks would laugh at me when I told them of these things."

The emotions of childhood.—There is in all of us an emotional feeling state accompanying every response to our instincts. These feelings are particularly noticeable in childhood. The child's love of being noticed is not, as in the case of older people, inhibited. For him, all of life is colored by the emotions. Stimulated by bodily motion and the activity of the senses, he feels keenly the satisfaction of moving about, the satisfaction of play. A little child was told to be quiet because her mother was very ill. She explained, "But, Aunt Elizabeth, we *have* to play."

A child has keen "sense hungers" and finds great satisfaction in touching objects. Most noises are pleasurable. A woman may be particularly displeased with squeaky shoes, but one young woman tells of the thrill of happiness which she felt when she went to school wearing a new pair of shoes. She says: "The greater joy if they squeaked, for then every one would know I had them. My shoes used to have patent leather toes, and woe to the boy who was so mean as to try and step on my toes to scratch the leather."

The interest of children in new shoes is frequently noticeable. Many little children seem to like to call attention to their shoes rather than to any other article of dress. Perhaps this is because they themselves can see these new shoes more clearly than their other garments.

A feeling in childhood which should be recognized is the satisfaction involved in ownership. Children do not seem to be natively communistic.

They love to possess, and this love of possession held within restraint is a valuable element in their preparation for life. A little girl was given a desk. She marched around it, singing triumphantly: "This is my own. This is my very own. This is my dear little desk." Part of her joy was doubtless due to the new experience of having a place for her own belongings.

Developments of feeling in later childhood.—As the child grows older one may observe that distinct changes have taken place in the life of feeling. There is something more of depth and stability by the time the age of eight or nine is reached. Emotions are still of the child type, but they are developing toward the deeper feeling possibilities of adolescence. There is a richer sense of humor, while a deeper seriousness is also observable. The personal friendships of later childhood are more enduring and there is a broader social interest than in the early period.

Reactions to the suggestions of older people vary with different ages. The little child responds more readily to direct suggestion than the boy or girl in later childhood or early adolescence, because fewer habits of inhibition have been formed, and a suggestion works itself out with relative ease. It is more difficult to secure formal discipline, unquestioning obedience, and willing response to suggestion from older children. It should be remembered that most children and adolescent boys and girls respond more readily to positive suggestion than to negative. Hence it is much better to give a positive direction, "Do this," than to give a negative direction, "Do not do that." A child's mind works directly and positively, and a little word like "not" slips very easily out of consciousness. Occasionally you will find a child who is distinctly counter-suggestible, or "contrary." One young woman recalls the following attitude: "When I was a child, if my mother told me not to do such and such a thing, more than likely I would '*have* to' do the thing, especially if I had been told that I might get hurt." Knowledge of such tendencies will help teachers.

How to direct emotions.—There was a time when the presence in children of strong emotions such as fear, anger, or hate was considered evidence of the total depravity of man. Hence it was the duty of educators to eradicate them by all possible means. We are learning in these days that emotions are part of our natural equipment and, like all other native human tendencies, are good or bad only as they are properly or improperly developed and used. Probably all our emotional tendencies and instinctive reactions, if they are carefully guided, inhibited in some situations, encouraged in others, and sublimated or changed in their form of reaction in still other cases, can contribute to the development of worthy character, moral life, and religion. One can no more develop worthy character by attempting to do away with the native tendencies to fear, anger, etc., than one can grow plants without roots. These are simply native tendencies which may be developed in such a way as to be socially useful rather than socially harmful. In order to learn how best to develop them, there have been many studies of the intenser emotions in children.

Fear.—Probably the greatest attention has been given to the emotion of fear, because it is so common in child life. Various writers have observed infants or very young children to see what environments cause fear. Thus, Dearborn describes what he believed to be signs of fear in a child on its twelfth day, when someone uttered a sharp exclamation. Preyer tells of a little girl who was afraid of cats as early as the fourteenth week of life, and many other careful observers describe very early fears stimulated by a variety of external occasions. Thorndike has described certain fear stimuli common to many children. These include sudden loud noises or clutches, the sudden appearance of strange objects, thunder and lightning, loneliness, and the dark. According to the scientific principles which Professor Thorndike has laid down for the study of native tendencies, it is not always a simple matter to separate that part of a situation which conditions a given reaction. It is possible that some of the reported stimuli to fear are connected with other elements which have not been observed. What cases of child fears have you noticed?

In very careful studies made by John B. Watson and Rosalie Rayner Watson, it is shown that the fear of the dark, of animals, or of furry objects in general, is not uniformly present in children.[1] Such fears may be encouraged by other circumstances involved in the total situation. Doctor Watson found that by bringing about a conditioned response to a given situation, he could cause the transfer of the fear involved to other elements of the original situation. A child in his twelfth month was shown a white rat. He reached for the rat and just as he touched it a steel bar was struck immediately behind his head. He jumped and his other hand touched the rat, when the bar was again struck. In later experiment it was found that the appearance of the rat brought forth evidences of fear. It was found that this fear which had been developed was also transferred in some degree to other objects which in certain particulars resembled the rat. Thus he was afraid of a rabbit, and of a fur coat.

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[1] *The Scientific Monthly*, December, 1921, pp. 493ff.

It is probable that very many of the fears which we observe in childhood are similarly complicated in their development. There are many cases of children who are not afraid of animals, even of strange animals. The fear of the dark is by no means universal in children. There are many children to whom no suggestion of the association of darkness with danger has ever been given. I have observed children who have slept in dark rooms from their earliest infancy who show no fear whatever in being shut into a dark room. One of the most vivid pictures of fear in literature is the description of Little Cosette, in *Les Misérables,* but it is easy to see that her terror is due to a complex experience of terrifying circumstances that have stimulated a distinct fear imagination.

The fears of childhood may become very serious in their reaction upon later life. Many serious mental disorders have been traced back to childish terrors and to the nervous reactions of fright. One should be very careful not to frighten or terrify a child. The full effect of such fright may not appear at first, but may result in serious nervous instability in adolescence or in later life.

Anger.—Anger appears very early in childhood. Sully describes a case of anger in a child of less than three weeks, occasioned by "momentary difficulty in seizing the means of appeasing appetite." Darwin describes a ten-weeks-old child who showed signs of anger on being given cold milk. Watson concludes that "the hampering of infant movements is the one stimulus which apart from all training brings out the movements we should characterize as rage."

When a child goes into a fit of passionate rage, of course he should be restrained from doing harm. Often a period of forcible but quiet restraint will bring a fit of such passion to an end. The self-possession of the older person caring for the child is indispensable. The fit of anger should be treated as an unfortunate illness that must be cured. It may be advisable to bathe the child's face and hands in cool water. As soon as he is sufficiently quiet to listen, an interesting story or a quieting song may distract his attention from the occasion of his anger.

As soon as a child is old enough to understand words he should be helped to see that his rage is useless. It is important that older people deal quietly and dispassionately with an angry child. Anger is not quieted by a counter attack of rage. Keep cool and be kindly as well as firm until the child is in a normal emotional state. Then, with care not to arouse again the angry passion, you may be able to lead the child to a reasonable view of the situation that induced the fit of anger.

Affection.—The affectionate responses of children are not, at first, evidences of disinterested love.

As has been shown, a child is decidedly egocentric. He is at first interested in others for what they can do for him. His affection is his response to affection. Much as the family cat will purr gratefully when stroked, so the baby will smile and respond with what we term affectionate movements to petting and the pleasant sensations involved in the attitudes of older people. Out of this type of affection there comes a gradual development of interest in others and sympathy for others. Children, particularly in middle and later childhood, show decided capacity for sympathy with individual suffering, but do not and cannot have the broader sympathy with larger groups of people which normally appears in adolescence and continues into adult life. An infant will frequently weep when he hears another child weep, but this probably does not mean true sympathy. Such sympathy is seldom noticed until well into the period of early childhood.

Feeling and Religion

The importance of feeling in religion should always be recognized. Religion is not, to be sure, a merely emotional experience, but emotion is a very vital and central element. A religion that is entirely intellectual is too cold and colorless and, indeed, valueless to be called a religion. A religion that is entirely concerned with activity and the will with no reference to the feeling life would be impossible, for the motive power that tones up the will and all the reactions of mind and body is the life of feeling. The very word "emotion" means an outward-moving force, a feeling that results in activity. Religion, in order to be balanced and wholesome, must combine intellectual activity, the life of feeling and the practical outcome in action that we have long called the will.

PROBLEMS

1. Read a newspaper story of violence or danger. Describe your feelings.
2. Can you describe your feelings when you hear your favorite music played or sung?
3. What effect does martial music have upon you?
4. Describe the different effects upon you of a military band playing a march and a violinist playing Gounod's "Ave Maria."
5. Does it help an athletic team to cheer them?
6. Would it help a group of students engaged in study to have their friends stand by, cheering and singing?
7. Does it make any difference what kind of songs we sing?
8. Can one study well just after a period of strong emotion?
9. What effects may our knowledge of our pupils have upon discipline?
10. What individual differences in emotion do you observe in your pupils?
11. How would you deal with the pupil who is so over-emotional as to interfere with the work of your class?
12. What is the value of posture, such as kneeling in prayer, in cultivating religious emotion?
13. Trace some effects of early likes and dislikes upon later life.
14. What kind of hymn contributes most to the worshipful spirit of a religious service?

Books For Further Reading

Introduction to Psychology, Seashore, Chapter XXI.
The God-Experience, Mudge, Chapters XI and XII.
The Psychology of Early Adolescence, Mudge, Chapter VI.
The Psychology of Later Adolescence, Mudge, Chapter IV.
The Psychology of Middle Adolescence, Moxcey, Chapters II and IV.
Psychology for Teachers, La Rue, Chapter XIII.
Social Psychology, McDougall, Chapters I, II, III.
Bodily Changes in Pain, Hunger, Fear and Rage, Cannon.
Essentials of Psychology, Pillsbury, Chapters XI and XIII.
Essentials of Child Study, Luckey.
Educational Psychology, Thorndike.
The Psychology of Child Development, King.
Studies of Childhood, Sully.
A Study of the Primary Child, Whitley.
Fundamentals of Child Study, Kirkpatrick.
Guide Book to Childhood, Forbush.

CHAPTER VI

STORED TREASURES

Suppose there were, lying on my desk, an orange. I could see it, feel its surface with my fingers, smell it, lift it and feel the strain in my muscles. These sensations being associated together and connected in my mind with many other factors that give them meaning, I would perceive an orange. As a matter of fact, however, there is no orange present. Still I have a faint representation in my mind of the color and other elements in the appearance of an orange. There is something in my mind that represents the odor and the other sensory factors that would condition perception if the orange were present. These inner representations are *images.*

Images

Images vary widely in clearness. Some are so dim and vague that they can hardly be recognized; others are so clear that at an extreme they amount to hallucination. Under the influence of extreme suggestion, as, for example, in hypnotism, or in the delirium of fever, I might seem to see an actual orange when no orange is present.

Types of images.—There are wide individual differences in the vividness of images and in the types of images that are predominant. Some of us, perhaps most of us, are "eye-minded"—tending to visualize even those things that cannot be seen. Thus there are many people who, although they believe God to be invisible, feel that they must picture him in visual terms. This tendency to form visual pictures of God is especially noticeable in children.[1] There are many people who are distinctly "ear-minded," in whom the images of sound are more vivid than those of other sensations. Images of odor are more significant than many of us realize, since they have often been associated with other experiences so intimately. An odor of mown grass or of an old-fashioned flower may carry the memory irresistibly back to the experiences of earlier years. The images involved in the intimate senses are very complicated and difficult to study, but they play a large part in that whole complex of experiences which gives meaning and value to our imagination and memory. There are some who tend to translate images into words and then recall not the object so much as the word that symbolizes it. Such a verbal imagery will recall not the visual appearance or odor of an orange, but the word "orange," as seen, heard, written, or spoken.

The value of images.—The importance of images is clear when we realize that imagination and memory are dependent on them. It is doubtful if we could even recall the names for things without the images, in terms of sensations, with which our minds tend to associate everything that has meaning for us. It is from these we build or "abstract" our ideas. Were it not for images, we should be life-long infants, knowing nothing of what happened yesterday or at any point in the past.

While clearness of images is not, by itself, a measure of intelligence, good imagery is important. The type may vary according to one's interests and particular capacities. Musicians, for example, are dependent on clear auditory imagery. Without it how could Beethoven, who became totally deaf before middle age, have become the acknowledged master of music? The author has a friend, a painter, who awoke one night with a clear mental image of the dark but vivid colors he would use in a picture of Omar Khayyam. Surely a vivid visual imagery is important for him. He must see his picture in imagination before he can paint it.

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[1] *The God-Experience*, Mudge, p. 8.

Development in images.—It is possible that children may have as clear images of certain simple and concrete things—as, for example, a red color or a loud trumpet-tone—as older people. They lack, however, the variety of images and the recognition of relationships that give them their richer meaning for adults. Imagery is developed by varied contacts and activities. It is important that from birth a child shall accumulate a rich store of images arising from beautiful colors and forms, musical and harmonious sounds, gentle touches, pleasant odors, and a mass of other sense materials that will determine in great degree the imagery of later life. It is possible to starve a soul by depriving it of the elements of beauty that are furnished by a wholesome environment.

Dependence on past experience.—Our imagination is limited by the experiences of our past. Even our dreams, however strange and weird they may be, get their images out of our past experiences. You may have in mind instances of imagination so wildly erratic and strange that they seem altogether independent of real sensations and perceptions; the explanation is in a certain integrating character of the mind that can blend utterly diverse elements into some sort of unity. The fantasy that seems unique can be divided into elements that are familiar. Thus the mythical centaur, half man and half horse, was a product of imagination, but the Greek who first conceived of this impossible creature was familiar with horses as well as with men. "I never saw a purple cow," says a humorist. The idea of a purple cow is a product of imagination, but the idea would have been impossible without a previous experience with cows and with a purple color. Can you imgine an animal whose parts are utterly different from any you have seen or heard about and of a color hitherto unknown?

Types of imagination.—*Memory* is a type of imagination. Since it is a restoration in the mind of images from the past we may call memory *reproductive imagination.* The process that combines images to form a new mental product we may call *productive imagination.* In many cases this type of imagination is *passive,* as in dreams or reveries. In other cases it is *active,* as in the assembling of familiar images and ideas in a new invention. The importance of this type of imagination can hardly be overestimated. All progress depends on it. Without it there would be no scientific discoveries, for there could be no hypotheses. There would be no new works of art, no new political theories. A world without imagination would be sadly and hopelessly conservative, if, indeed, man could survive in it at all.

Training imagination.—Do not think of imagination as a separate part of mental life that can be developed by itself. Imagination is merely a phase of the human mind, or one process of its working. The mind is really a unit and any worthy type of education will seek to develop it on all sides and in all its phases. We cannot train our pupils to think without training their imagination. We can, however, look at mental activity, first from the standpoint of one phase or process and then from another. Thus we can train our pupils to use their powers of imagining in a useful way. We can furnish them with such materials for their images as will contribute to wholesome thought, and we can lead them in such active projects as will utilize imagination in the interest of service. For example, we can provide the materials for vivid mental pictures of the needs of Chinese children for hospital care and then may furnish the opportunity for contributing to these needs by their gifts of money. It is not always wholesome for our pupils to follow precisely the images set by others, as in reading stories or watching motion pictures, without following this imaginary participation in the lives of others with acts and attitudes of service which require a creative use of the imagination.

Artistic imagination.—Imagination has other uses than its immediate application to social activity. It has large indirect value in relation to those cultural elements in life that contribute vitally to making life worth while and thus developing a personality that may be of high service to society. Not all of our pupils can become creative artists, but all can in some degree make an active, creative use of imagination. There is high educational value for this purpose in telling stories, drawing pictures, modeling, singing, or playing musical instruments. There is an excellent educational opportunity in the current movement toward dramatics in religious education, especially in the encouragement of our children and young people to construct biblical and other plays of their own.

Imagination needs both material and guidance. See that your pupils are familiar with the noble works of literature and sculpture and painting. Bring them into all possible contact with outdoor nature and, indeed, with all things good and true and beautiful.[2] Give them an opportunity to express their own interests and share them with others.

Child imagination.—What evidences of imagination can you see in the children of your acquaintance? Are they interested in stories? in dramatic play? in pictures? To ask these questions is to indicate at once the great place imagination has in childhood. This is demonstrated by the remarkable collections of poems and stories by children that have recently attracted attention. The instinctive impulse of play is closely related to the native tendency to think in pictures, to be interested in past experiences, and to seek in some fashion to re-enact them. So vivid is a child's imagination that the line between fact and fancy is sometimes almost indistinguishable. A doll of even the crudest construction becomes to the little child a real living thing. One student recalling her own childhood, says: "I used to believe that my dolls were alive, which afforded my mischievous brothers much amusement. They would stand them on their heads and watch for effects. I would run sobbing to my mother declaring, as I felt, that all the blood would run to their heads and that they would surely die."

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[2] There is good psychology in Philippians 4. 8.

The psychology of childhood was practically understood by an English writer of an ancient day, who tells the following story:

"A Gentleman, having led a company of children beyond their usual journey, they begain to be weary, & joyntly cried to him to carry them; which because of their multitude he cd not do, but told them he wd provide them horses to ride on. Then cutting little wands out of the hedge as nagges for them & a great stake as a gelding for himself, thus mounted, Phancie put metall into their legs, & they came cheerfully home."

The child's world.—The world for children is full of a fairyland romance. Fairy tales are the normal literature for children, for they express the mystery which a child finds in everything about him. Mr. Chesterton says that the only words that ever satisfied him as descriptions of nature are those used in fairy books, "charm," "spell," "enchantment." "A tree grows fruit because it is a magic tree. Water runs downhill because it is bewitched." This poetic attitude toward nature is normal and natural in childhood.

The world of childhood is a living world, and many of its objects are personified in the child mind. Various students, recalling their childhood, mention their conversing with the trees, the birds, the animals, the grass and the flowers, and with the flowing water of streams. One child came into the house from play and asked, "Did a brook ever get tired?" One woman says concerning her childhood: "I used to hate to pick flowers and not put them in water because I knew they would die, and to my sympathetic mind this death by thirst seemed a horrible thing, and when it would rain I would feel so happy for the flowers, because they were, as I expressed it, getting a nice, cold drink." Another writes that "the trees and flowers were real to us. We used to almost cry when a tree was cut down because of how it hurt the tree. After hearing the story of 'Johnny and the Anemone,' we couldn't pick flowers because it was pulling off their heads."

Dreams and "Lies."—This world of personified nature is closely related to dream life. The dreams of childhood are often very vivid. One student writes: "I can remember in early childhood of having very wonderful dreams. They were usually about animals gifted with all the powers of human beings; and I'm sure if I could remember my dreams distinctly, they would make as wonderful a collection of tales as *Alice in Wonderland* or even *Gulliver's Travels.*" Another student reports: "Dreams were very real to me when I was a child. One night I dreamed that I fell from a second-story window onto an outside cellar door and broke it into pieces. Then they carried me into the house and put me to bed. The next morning I went out to see how badly the door was broken."

Many of the so-called falsehoods of children originate in the nature of their fancy-loving minds. One little child who lives on a large farm and has few playmates consoles her loneliness with two imaginary friends, Cordelia and Don, who come to her whenever she wishes for them. One day this little girl came running to her mother and said, "Come and see the great, big bear in the barn. It is as big as a house and is black." The mother was wise enough not to laugh at the little child, and she went with her to the barn, but there was no bear there. "Perhaps he will return to-morrow," suggested the mother. "I think he will," replied the child, "because he is a very nice bear."

A picture of the imaginative play of many a child is given in the following recollections of a normal-school student: "There was a beautiful grove that had rocks over which I used to ramble alone. White pebbles were everywhere, and I used to make my initials in the green moss with them. Each path in this grove was an important street. The large rocks were business buildings. What my play would have been in a city I cannot imagine, but I am thankful for the freedom of my childhood on the farm."

Elizabeth McCracken observed a distinction between the group play of children and their solitary play in that they are more likely when playing alone to impersonate the heroes and heroines of books, plays, and stories. The solitary child is more distinctly free from self-consciousness, and hence his play may be more spontaneous and natural.

The imagination of adolescence.—Imagination continues to develop in the transition period that follows childhood. The child world is succeeded by the world of adolescence, and this, in turn, merges into the world of adult life. Adolescence "throws over the world a new glamour through a new appreciation of the meaning of the world and nature and human society. It is the age of a new insight, when nature and art acquire a deeper and more intimate significance, when one's relation to society is felt with unique keenness, when new attention is given to moral values, and when religion attains a deeper personal meaning. The fairyland of childhood has faded, leaving sometimes a sense of regretful disillusionment; the world of later childhood has lost much of its mysterious charm; and then the rosy glow of awakening romance colors all things, while it throws the newly discovered valleys into deeper shadow."[3]

MEMORY

My little daughter is learning the Lord's Prayer. She is not studying it as a lesson but every morning after breakfast she hears it repeated. At first she listened quietly, then she began repeating certain words or phrases of it, with the family, and now she is able to repeat all of it when we say it slowly in unison. This bit of learning illustrates these facts:

1. Every sense experience leaves some trace or impression in the nervous system.
2. Many of these impressions are too slight to be recognized by themselves.
3. The recurrence of these impressions results in habitual action.

Repeated sense experiences and their effect in establishing associations in the nervous system are determining factors in habit, they make a rich imagination possible by holding a wide variety of images in their treasury, they are essentially involved in the learning process, and they constitute the basis for memory.

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[3] *Psychology of Early Adolescence*, Mudge, pp. 52, 53.

Memory and imagination.—Memory was defined earlier in this chapter as reproductive imagination. Like any other form of imagination it employs images, but it uses them a little differently. It does not put them together in new combinations but, rather, seeks to set them in their original combinations. Of course there are failures and losses—no memory reproduces with absolute fullness and accuracy—but when we remember a thing we have a very different mental state than when we imagine a thing. Our memory at least seems true to the past experience. Of course there are times when you are not sure whether a given experience is a genuine memory or an imagination—perhaps it is a dream—but you are sure there is a distinction, and sure that many of your memories are true to past experience.

The value of memory.—Suppose we had no memory (though it is, indeed, well-nigh impossible to imagine such a state). We should be able to learn nothing from experience, should lose the power of continuous thought, should lose all connection with the past either of ourselves or of the race; in fact we should be as helpless as imbeciles. Memory is essential to progress, to the development of individual or social character, to all mental life worthy of the name. This is not to say that memory is supreme among our mental processes. Its value depends upon the value of what is remembered. Some people fill their memories with trivial and unimportant things. Some church-school teachers urge their pupils to commit to memory things that are of slight value, if any, in religious education. What is the value of knowing the number of chapters in the New Testament, or what is the longest chapter in the Old Testament, compared with remembering the beautiful poetry of the twenty-third psalm and learning its meaning? As teachers we should encourage our pupils to store their memories with those things that are most valuable to the developing spiritual life.

Marks of a good memory.—A good memory is *selective.* It does not try to remember everything. If your pupil tries to remember everything that comes into his experience, he will be confused and distracted. Some things are not worth remembering. Others are of value for only a short time. Your telephone number or the number of your hotel room is valuable to you until you move to another residence or to another hotel. After that their retention is usually unimportant.

A good memory is *systematic.* It is organized. It does not trust to chance to fix the valuable things in mind but deliberately plans their retention.

A good memory is *applied* to the practical problems of experience. Some memories are stored with valuable but unused truth. There are some who can repeat large parts of the Bible but who fail to apply their teachings to their lives.

Child memory.—Very early in life a child begins to recall events in conscious relation to himself. He has dreams and recalls them when he awakes. He treasures up the events of yesterday. But his memory is much less developed than that of an adult. It is more erratic. He recalls events in flashes rather than in connected series. His mind becomes full of bits of information that are, for a long time, relatively disorganized and unrelated. After years of experience and training the normal child learns to relate things together in logical relationships.

Adolescence and memory.—Memory at any period of life is conditioned by interest in the thing to be memorized or in some end to be gained through the use of memory. Memory ability, especially as it is affected by logical relationships, increases through adolescence and remains at a relatively high point throughout most of adult life. Many of us think we have poor memories because we seldom become interested in putting our minds to the test.

PROBLEMS

1. A passing stranger looks at the house in which you live. How do you think his state of mind with reference to this house differs from your own?

2. Have you any difficulty in imagining (*a*) a small giant? (*b*) a man going east-west? (*c*) an elevator going both up and down at the same time?

3. What is the value for temperance education in describing the effects of intoxicating liquor?

4. Open your mouth wide and think intensely of the sound of the word "bubble." What happens?

5. Why do some children have "imaginary playmates"?

6. How can we make sure that our pupils have a good stock of images?

7. How complete is your memory of your childhood? Is it connected or disconnected?

8. Is it ever important to learn to forget? How can we do this?

9. What is the value in memorizing Bible verses?

10. Is a notebook an aid to memory, or a hindrance?

11. Suppose you wish to commit a speech to memory. Which will be the better way—to sit down and read it silently or stand and read it aloud?

12. Is cramming for an examination a good practice or bad? Give a reason for your answer.

Books For Further Reading

Psychology in Daily Life, Seashore, Chapter II.
Introduction to Psychology, Seashore, Chapters X and XVIII.
Psychology for Teachers, LaRue, Chapters IX and XI.
Psychology for Normal Schools, Averill, Lesson 37.
Control of Body and Mind, Jewett, Chapter XXIV.
The Mind and Its Education, Betts.
A Study of the Little Child, Whitley, Chapter VII.
The Psychology of Early Adolescence, Mudge, Chapter V.
Methods With Adolescents, Pringle, pages 59-66.
Readings in Educational Psychology, Skinner, Gast, and Skinner, Chapter XIII.
Psychology, Woodworth, Chapters XIV, XV, XIX.
Child Psychology and Religious Education, Wilson, Chapters III and VIII.

CHAPTER VII

THE PUPIL AS THINKER

WHAT do we mean when we use the word "think"? Sometimes we mean "suppose," or "take for granted," as when we say, "I think so." Sometimes we mean "meditate" or "ponder," as when we say, "He seems to be thinking about something." What we have in mind in this chapter is reflective thinking, the mental process by which our pupil discovers new truth or strengthens the foundation under a truth that is already familiar.

CONCEPTION

The first essential element in thinking is conception. Before reading further, write a definition of the word "book." Keep at it until you are sure your definition is a fairly adequate one. Then try to retrace the processes of your mind. Did your first tentative definition of "book" include something else than books? Did it fail to include every type of book? Could you formulate a definition of book that would include both modern bound volumes and ancient parchment scrolls? The process of making a definition is really the formal process of developing what is called a concept. If you will undertake the task of writing a few definitions, you will realize how fragmentary and imperfect many of our concepts are. Perhaps you will also acquire a new respect for the dictionary-makers.

We can learn many interesting facts by trying to analyze our own experience as we attempt to clarify a concept. What images does the word "book" bring to you? Perhaps visual images of volumes large and small and of variously colored bindings, perhaps olfactory images of the odors characteristic of the library stacks, together with other images—a complex mass of them, all associated with the word "book." In making your definition you began to separate those characteristics of book that were really typical. That was a process of abstracting. Immediately you began to generalize—to apply mentally the abstracted characteristics to all books. This process, of course, was tentative at first. "Books are layers of paper bound together" would be a trial definition that, of course, must be rejected if the definition is to include the ancient papyrus or parchment records.

The outcome of the process of abstraction and generalization is a concept. An essential climax of the process seems to be the attaching of a symbol to the developed concept—a word that becomes a label or tag for the entire generalizing process.

This experiment with concepts shows clearly that these are not fixed and uniform elements in our minds. They differ as we differ and they grow as we grow. When our pupil was an infant, he had no such concept as "book" at all. After a time he handled a few books but their meaning for him was very limited. He knew nothing of other kinds of books than those in his home nursery. When he entered the first grade, his experience with books became broader, and widened again when he was old enough to know about the great range of books ancient and modern. "The concept," says Seashore, "is never closed."[1] It develops as the experience of our pupil develops.

A word, however, is a remarkable device for unifying experience. From infancy words become convenient symbols. Our pupil uses the word "book" and we are quite sure that there is some common element in his concept and ours. It is one of our most frequent errors to consider his concept to be in all respects a duplicate of our own, for that is really impossible. Normally all of us should be putting new meaning into words throughout our lives.

JUDGMENT

The Standard Dictionary defines logic as "the science or doctrine of correct thinking." Much of our thinking is incorrect or fragmentary, but when it is clear and relatively direct, we can distinguish the relationship of judgments to concepts. A judgment is really our answer to the question, "What is it?" As an example of a situation demanding a judgment, you look out of the door and see some white flakes floating toward the ground. What are they? Are they snowflakes or bits of white paper or flecks of white ashes from a chimney fire? You can see no smoke, therefore the flakes are probably not ashes. The day is warm and there are no clouds above you. They are probably not snowflakes. You weigh the evidence for the third alternative and make your judgment that these flakes are bits of paper.

Judgments are often erroneous, and it is an important educational task to develop in our pupil a habit of critical judgment. He may err in judgment because he does not perceive accurately. For instance, he may think he hears a loud sound at a distance when it is really a slight sound near by. The screams and cries that have been reported about so-called "haunted houses" or in connection with cases of crime have often been nothing more than the voices of owls or cattle or straying cats. Any defect in concepts will be reflected in faulty judgments.

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[1] *Introduction to Psychology,* Seashore, p. 284.

The formal expression of a judgment in words is a sentence. The words of the sentence represent concepts and their relationships. Naturally, any error in the use of a word affects the entire sentence and the judgment it expresses.

Substitutes For Thinking

A distinguished educator is reported to have said that nine tenths of our people are not capable of thinking for themselves. It would probably be more accurate to say that most of us do very little thinking for ourselves. Many persons are perfectly able to think who seldom do think. There is a great deal of intellectual activity going on in our day and generation. Witness the great number of books that are published annually. Witness the abundance of magazines on our news stands. Witness the great number of societies and associations, each organized to promote its own pet propaganda. Nevertheless, it may be doubted if there is relatively as much actual reflective thinking as there was in more primitive times. The barbarian lived a relatively simple life, but it contained many new situations that must be met by thought and reason.

In contrast, many of the situations in which we find ourselves to-day were faced and their problems solved by our ancestors. We have ready-made responses to them; for us they are not problems at all. We do little real thinking because we have a variety of substitutes for thought, and thus are ill prepared to think when thinking is needed.

Tradition.—Our fathers learned many lessons of life that we do well to remember. Civilization has for many centuries been accumulating bits of wisdom and adding them to its ever-transmitted store. But with the accretions of valuable truth there are admixtures of error. There seems to be an instinctive tendency to be credulous, to accept statements on little or no evidence. In the conservative society developed through this tendency, he who criticizes the traditional is likely to be branded a radical or revolutionary thinker. To the conservative mind to criticize a tradition is dangerous. Doubtless our society needs a considerable proportion of social conservatism, in order to retain those elements in our traditional heritage that are permanently valuable. Those who criticize the current order of things, examine our traditions with scientific impartiality, and seek to discover new truth may always be in the minority, but it is through them that the changes come that make progress possible.

Prejudice.—However we arrive at an opinion, when it becomes so fixed that we are unwilling to submit it to the tests of reason, or feel unable to criticize it by the standards of thorough thinking, it becomes a prejudice. A prejudiced opinion may be true or false but it is always, as the name signifies, prejudiced—accepted without the test of careful judgment. It has been said that what most of us call thinking is merely the rearrangement of our prejudices. Of course it is necessary to accept many things on the authority of others, but we should always be ready to recognize the true status of such opinions and to test them ourselves or accept the tests of others. Properly we accept the judgment of our physician and base our opinions of our physical condition on his experience, but we should always be ready to submit any judgment, even expert judgment, to reasonable criticism.

Wish thinking.—The term "wish thinking," or "wishful thinking," represents a form of thinking that is based on one's wishes as expressed in feelings and emotions rather than upon the use of definite information. The attitudes developed by this sort of pseudo-thinking are not the result of careful analysis, but of a vague feeling of desire for certain ends. Such is much of our so-called thinking about politics, race-relations, world-peace, and other important fields that really need our most serious and careful thought.

Rationalizing.—The tendency to defend our traditionally accepted or prejudiced ideas or beliefs by building up supporting arguments in their behalf has been called rationalization. If someone threatens you with a blow you are likely to assume involuntarily an attitude of defense. Similarly, if someone challenges one of your ideas or beliefs, it is natural instinct that bids you defend it. So you gather every reason or pseudo-reason that can be used to buttress the accepted idea or principle and also to strengthen your own confidence. The difficulty with this substitute for clear thinking is that it can be used as readily in defense of error as of truth. Its place among the thought processes is akin to that of the legal shyster among attorneys. It seeks not for truth, but for vindication.

Dream and fantasy.—You may perhaps discover, among your pupils, one who seems determined not to accept or face the realities of life, but who lives in daydreams and fantasies. These are characteristic of childhood, but they are not always abandoned in adolescence or even at the beginning of adult life. Observe the popularity of romantic novels and plays. Some of them, to be sure, seek to fit us for real life with its joys and sorrows, but a great number of them minister to nothing better than a desire to escape from reality. Tendencies to evade reality and build up a dream-life of fabrication may be quite harmless in their effects or they may lead to more dangerous states of mind. Overstreet, in an interesting chapter on "Fabrication Habits," attributes to this tendency to evade reality or to compensate for our own limitations such things as our interest in the titles and uniforms of fraternal orders, our racial and ecclesiastical prejudices, our social snobbishness, and our superstitions.[2] If we would do away with intolerance and prejudice and social hatred, we must seek to lead our pupils to face life and learn to appreciate and value the realities of experience.

CONDITIONS OF EFFECTIVE THINKING

The world needs thinkers. Plato, in his ideal republic, would have a government by philosophers—

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[2] *Influencing Human Behavior*, Overstreet, Chap. X.

an aristocracy of thought. In our day there should be a democracy of thought. With universal education and majority rule, the majority of our people should be effective thinkers. The sad fact is that we still follow demagogues and spellbinders and are to a great degree ruled by our prejudices, superstitions, and untested traditions. How can we secure for our pupils the conditions that will make them thinkers?

Attention.—Real thinking requires effort. It is not always easy to fix the mind on a problem and hold it there. Attention, the fixation or focusing of the mind, is very properly the serious concern of the teacher. It is clear that no teacher can do much with an inattentive class. The present consciousness of our pupil has a very limited scope. At any given moment one, or at most a very few things, can be held in clear attention. This being true, your pupil cannot keep his mind fixed on the problem you are discussing in your class and at the same time on to-morrow's football game or the purchase of a new gown. Your practical problem of keeping the lesson of the hour within the mental focus of your pupils may be aided by a discussion of the various types of attention.

1. The first type of attention is *involuntary*. It requires no distinct effort. If a rifle were to be fired near you, you would involuntarily turn your attention to the sound. If a tardy pupil stumbles and falls, on entering the classroom, there will probably be enough noise and confusion to direct the attention of the other pupils from whatever may have been in their minds. Even an infant will show this sort of attention.

2. A second type of attention is *effortful.* This is the attention your pupils give when they are studying a real problem. Sometimes it is very hard for them to resist the call of many other things that are bidding for attention.

3. There is a third type of attention called *derived* attention, from the fact that it is developed through the effortful attention above described. In many cases the attention that at first requires effort becomes easy, so that it may require no distinguishable effort at all. The first chapter of a novel may be "hard reading," the mind being fixed upon the characters and setting of the story with some difficulty. But after some time, if it be a good story, you become interested in the characters and the development of the plot, and the story holds you without much effort on your part. Similarly, a student may become so engrossed in a problem that nothing can take his mind from it.

Rhythm.—In order to study efficiently, our pupil should know the law of fluctuation in attention. Attention naturally shifts, with a rhythmic variation that differs in rate in different persons. Our pupil cannot hold his attention fixed upon any given thing without change. In spite of him, it slips away from his problem. The best he can do is to keep bringing his mind back determinedly and regularly to its task. There are fluctuations at intervals of a few seconds and greater variations at longer intervals. A study of the natural fluctuations of attention in a given pupil may be of value in determining his most efficient method of study. With children, study periods should be shorter than with older pupils. In all cases a carefully planned program of varied activities, with a proper emphasis on the positive and strong effort of attention upon each problem as it arises, will be more effective than an attempt to hold the attention to a steady, unrelieved, grinding effort. A particularly undesirable type of attention is that which is divided between two or more objects, being shifted back and forth in an attempt to hold two sets of ideas in mind at the same time. Strange to say, this sort of attention is often the result of the teaching that insists upon holding the attention effortfully and steadily to one problem. The pupil's mind will wander and he may get the habit of dividing his attention between a tedious lesson and some other more interesting subject of thought.

Interest.—Comenius described a teacher sitting before a group of boys who "place their attention like a wide-mouthed phial beneath the words of wisdom that flow from his lips." Dickens, in his satirical description of Mr. Gradgrind and his school, similarly pictures the pupils as so many jugs to be filled with the master's accumulation of "facts." This jug-filling theory of education seems well adapted to subtract from any subject of study most of its elements of interest.

Our educational blunders have been many. We have insisted on the forcible mastery of uninteresting subjects or we have tried to motivate their study by attaching interesting things to them. What we have forgotten is that most facts have high possibilities of interest if they are connected with life in their naturally unified relationships. When we isolate a series of facts—the multiplication table or the names of the books of the Bible, for example—

separating these facts from their relation to vital life processes and problems, of course they are uninteresting and their study is a task. But they need not be so unrelated. Normally, multiplication is related to problems of building and construction that have a vital appeal to young life. Normally, the names of the biblical documents are related to the developing history of an interesting people. The history of the Hebrews has been made uninteresting by many teachers who were not interested in it and who did not recognize in their teaching its relation to the living, vital interests of modern boys and girls.

John Dewey tells us that if we discover what are the needs and powers of our pupil and then produce an environment that will supply these needs and direct these powers, we need not worry about interest. The satisfaction of our pupil's native needs and powers is fundamentally interesting, and it may be doubted if any thought-process that does not appeal to the native wants and instinctive urges of our pupils is ever effective.

THE RELATION OF THINKING TO RELIGION

An ideal religious life involves all phases of human experience. It must be supported by warmly vital emotional states. It must be actively practical in working out the highest ends of individual and social behavior. It must also utilize the intellectual powers. There is, however, a frequent tendency to stress some one of these elements out of proportion. Thus there are persons and religious groups that give the chief place to emotion. They value sermons and hymns and prayers as they become emotionally stirred through them, while they disregard, in too great degree, the other balancing factors in religion —clear thinking and practical responses in conduct. Others place the chief emphasis on activity. They are busy with the work of the church and with charities and reforms, but they fail to realize the importance of clear judgment and a vital feeling experience. Still others place a dominant stress on the intellectual elements of religion—doctrine and belief. The fact is that all these elements are essential and interdependent. Some have thought that the teaching of Jesus was centered in activity—doing the will of the Father. But this experience of active social behavior was to be motivated and empowered by the emotional life of prayer and love and inner devotion and its continuance must depend on intelligent interpretation by correct thinking.[3]

Crystallized thinking.—Whatever we call them we shall always have creeds—some sort of intellectual formulas to represent what we think about the religious life. The sad fact is that adopting a creed may involve no thinking, but only accepting uncritically a mass of vague traditions and deep-seated prejudices. Much of the current superstition that is often confounded with the vital principles of religion is due to the mental laziness that refuses to examine and test our beliefs. Perhaps some of the beliefs that you consider superstitious are true. It is your responsibility to test them. Without exalting the intellect to a supreme place in religion, we should clearly realize that the same mind that operates in the study of mathematics or natural science, through the use of their proper facts and laws, is competent to examine the facts of religion according to its laws of evidence. A religious life that is supported by an unthinking acceptance of traditional beliefs lacks one of the essential elements of a well-balanced and secure religious experience.

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[3] John 7. 17.

INTELLECTUAL DEVELOPMENT

The mind of a child at birth is not a blank, but it is an unorganized mass of sensations and feelings. It requires experience with the world to develop such mental activities as we call thinking and reasoning. However, from the early years of childhood, we can discover the growing ability to make judgments and to compare them with one another. A child develops the ability for crude inferences very early. There is something of the nature of thinking involved in the meeting of new conditions, even by a child.

The thinking of childhood.—No one has an equipment of instincts adequate to meet all the experiences of life. Habits have to be developed through experience. As new situations arise, children learn to relate them to their previous experiences, and even in its very crude form this use by the child of early experience in adjusting himself to new situations has in it something of the nature of logical thinking. Let us bring to mind some instances of this from the remembered experiences of a group of students. A little child whose father was a postman of course knew the difference between her father and other postmen, but thought that every mail carrier's name was "Daddy."

Another had a curious mixture of ideas, in thinking that when the fire bells rang, the firemen were coming to burn somebody's house. These ideas, however, indicate that some process of thinking, inadequate though it is, judged by adult standards, is going on in a child's mind. Many illustrations of the curious logic of childhood and the misunderstandings of child minds might be cited.

Things that are perfectly familiar to older people are mysterious to children and an entire philosophy of life and nature has to be developed. Many children have vague ideas as to the significance of growth. A little girl of three spoke of the time when she would be a big girl and her mother would be a little girl. A normal-school student recalls her child idea that she would always remain a child. She was skeptical when told that her parents were at one time small children. Still another, recalls the belief that all people keep on growing, and says that she was somewhat concerned as to what would happen when she grew so tall that her head touched the sky.

A growing world.—The world to a child is judged by the child's own experiences. Thus various children seem to think of the horizon as the end of the world and to have very vague notions of anything beyond the world of their experience. As a child's world grows, so his powers of thinking and reasoning develop. When he is old enough to enter school, he has a large number of ideas which he is in process of organizing. The little child is more credulous than the boy or girl in middle or later childhood. When middle childhood is reached, children are beginning to test the statements of others.

There is a demand for certainty which appears noticeably at this time. Contradictions between children or between children and older people are much more common than in early childhood. Children are beginning to distinguish between actual matter-of-fact happenings and fairy stories or fiction.

Throughout childhood there is a development of the instinct of curiosity. The boy of six or seven is becoming interested in the internal mechanism of his toys. All sorts of experiments are made by children in order to satisfy this curiosity. It is interesting to observe the development of creative imagination. The tendency to inventiveness is prominent in middle or later childhood. Bertram Smith describes experiences similar in nature to those of many children when he tells of the string on pulleys with which various messages or objects were sent from a second story window to the lawn outside, or the flashing of code signals by bright pieces of glass, or the consummate achievement of a series of tilted mirrors by which the children worked out "a perfected chain of vision" from a second-story nursery down stairways and around corners to the storeroom in the basement.

In later childhood the ability to reason has greatly developed. Boys and girls of this age are very generally interested in puzzles, conundrums, and similar games. They have an increasing interest in memorizing that makes this an important period for storing up memory material. Bible verses and chapters that interest the boys and girls are readily memorized and will be of increasing value in later years. As adolescence comes on, with its broadening world and its greater intellectual independence, the boys and girls often lose interest in memorizing the words of others. But they have an increasing power to hold in memory whatever they consider important.

Mental fatigue.—Children's minds and bodies fatigue relatively easily, but respond very quickly to the processes of restoration. The period in which a child can hold his attention upon a given thing is shorter than the corresponding period in adult life. Consequently, tasks for children should be short, followed by short periods of relaxation; and the lengthening of these tasks should be very carefully considered in relation to the developing mental nature of the child. Concentrated attention is normal in childhood, but is naturally restrained to short periods. The discipline of the schoolroom depends very much upon the understanding of this principle. Mental fatigue is indicated by the fidgeting of children, and such evidence of nervousness in childhood should guide us in determining the length of periods of study and work.

Language affecting thought.—The development of language parallels and largely conditions the development of thought. A child's mind, always colored by imagination, is developed through its expression in language. Children very early show an appreciation of the imaginative and fanciful, and this affects their interest in stories and story-telling, by themselves or by others. The love of stories appears very early and undergoes characteristic changes as a child grows older. The first story interest of children is apt to be in rimes or jingles such as those in Mother Goose. During the second and third years the Mother Goose stories are exceedingly interesting, largely because of their rhythmic form and the simple and familiar objects and actions contained in them. By the fourth or fifth year a child's interest is likely to have changed, and fairy stories and similarly fanciful tales become interesting. There is still an interest in the rhythm of the stories, but they need not be in verse form.

The primary children of from six to eight are much interested in fairy stories, but perhaps more interested in stories of child activity, the activity of children like themselves. During the years of later childhood, from nine to eleven, there is a decided interest in biography and adventure. This is an active period and children love stories of activity.

The period of early adolescence, and in many children the preceding period of later childhood, show very commonly an intense interest in reading popular science and invention, history and many other types of literature. From about twelve to about fourteen there is some difference between the reading interests of most boys and those of girls, the boys usually being more interested in travel, mechanics, and science, possibly due to the socially encouraged vocational interests of boys. Girls are generally interested in novels and romances earlier than boys.

Both in later childhood and in early adolescence boys and girls should have plenty of well-selected reading matter and their libraries should be thoroughly supervised and the best books made available for them.

The interests of children of different periods have been very carefully studied by teachers, authors of children's textbooks, and library workers. The persons in charge of the children's departments in schools and public libraries should be consulted regarding lists of stories to be told to children and lists of books which children may read. Excellent lists of stories for children have been prepared by the Library Division of the Bureau of Education.

PROBLEMS

1. Try six of your acquaintances to see what the word "education" means to them.
2. Why do so many debates and arguments center in the definition of terms?
3. How can you distinguish between thinking and daydreaming?
4. Does it make any difference what you believe? Give an instance in which a belief might be positively harmful.
5. What do you mean when you say, "I know"?
6. Repeat a familiar stanza and at the same time write part of the multiplication table. From this experience can you formulate a principle of attention?
7. What is wrong with the statement, "All girls are frivolous"?
8. Must one have correct ideas about religion in order to be religious?
9. Can you be sure that you have a complete and adequate idea of God?
10. What are some of the causes of inaccurate thinking in children and adults?
11. Is it true that the reason why some things are uninteresting to us is that we do not know enough about them?

Books For Further Reading

Psychology for Teachers, La Rue, Chapter XII.
How Children Learn, Freeman, Chapter XI.
Psychology of the Junior High School Pupil, Pechstein and McGregor, Chapter VII.
Psychological Principles of Education, Horne, Chapter XIV.
Principles of Teaching, Thorndike, Chapter X.
Readings in Educational Psychology, Skinner, Gast, and Skinner, Chapters XV and XVI.
Introduction to Psychology, Seashore, Chapter XX.
Psychology, Woodworth, Chapter XVIII.
About Ourselves, Overstreet.
Influencing Human Behavior, Overstreet.

CHAPTER VIII

APPRECIATION OF BEAUTY AND CREATIVE ART

Among the most important influences that affect the lives of our pupils we must include the appreciation of art and beauty, as well as the joy of some sort of creative activity. Some degree of appreciation may be found wherever there are human souls. Sometimes the sense of beauty seems but slightly developed and often it is positively perverted, but it is a common trait of all humanity. The beauty of nature makes a deeper appeal than many will acknowledge and the appreciation of art is to be seen in the pitiful attempts of the poorest to add some bit of decoration to his person or his home. If we had no sense of beauty or desire to make our homes and public buildings beautiful, we should annually spend millions of dollars less than we are now spending. Observe the first house you pass and estimate how large a part of its cost was expended for "looks." Were we concerned merely for the efficiency of our clothing—long wear, warmth, simplicity and inexpensiveness of making, and ease in keeping clean—we could dress on a small fraction of what our garments now cost us.

Beauty and emotion.—The appreciation of beauty is an emotional or feeling experience. We say we like certain colors. We mean that these colors awaken certain pleasant feelings within. Of course we can reason about the intellectual values of form, proportion, and design in pictures, music, or other works of art, or about the elements of beauty in a tree or a waterfall or a mountain, but the chief and fundamental element in appreciation is feeling. I cannot say why the first chords of the New World Symphony produce such an inward thrill in me, nor why I am always cheered and uplifted by Breton's "Song of the Lark." The secret of the appeal of beauty lies deep among the native feelings of humanity. We can, however, observe certain facts about the life of appreciation which seem to be of general application.

The development of appreciation.—Appreciation can be developed and refined. In a low state of civilization, as with little children, crude pictures or images are often highly valued, mostly for their bright colors. Civilization raises the standards, introducing softer colors and more skillful drawing and modeling. The music of savage tribes may be the pounding of the tom-tom or the weird chants that accompanied tribal dances. Its development introduces softer tones, more varied effects, the development of melody and harmony, until we have the higher forms of musical art.

There can be a similar development in the art appreciation of an individual. The child who loves bright, crude colors, who is delighted with bright red dresses and highly colored pictures, can be led by sympathetic parents and teachers to develop an appreciation of the higher forms of art and beauty. The child who loves to beat his noisy drum may be led to appreciate accurate rhythm, beauty, and variety of tone, and other elements of artistic music. This is not to say that all children can become artists. They can, however, develop out of their crude, early likings a higher appreciation of beauty.

DEVELOPMENT IN VISUAL ART

A little child lives in a world of vigorous sensations. Naturally, the stronger sensations attract his attention first. The more violent colors, the louder sounds, the more distinct odors and the stronger sensations of every type make an early appeal. It takes time for a child to develop an appreciation of delicate colors, complicated forms, and the finer distinctions of light and shade. But from very early infancy one can distinguish a tendency to prefer certain colors or forms or brightnesses. An infant indicates a preference by giving attention to one of two objects rather than the other.

The preferences in colors or forms thus early distinguished indicate the beginning of æsthetic appreciation. There is appreciation of this sort in terms of every sense. A child appreciates certain odors and certain tastes, as well as certain sights and sounds, and all these appreciations may be considered æsthetic judgments and attitudes. Perhaps the kinesthetic sense by which a child's developing muscles are able to distinguish forms, weights, and movements involves as great æsthetic appreciation as any other sense. But the appreciations of visual elements, color, brightness, and form are particularly conspicuous and easily observed.

Development of preferences.—It is difficult to determine the early development of art appreciation in childhood. However, in infants we can detect preferences for colors and possibly for forms.

The baby is attracted by bright color. Some have held that red has a greater attraction for a baby than blue, but it is very probable that the reason for this is that the red objects which are presented to children are apt to be brighter than blue objects. Miss Shinn, in her notes on the development of a child, reports that the baby whom she so carefully observed showed an expression of interest in a dark-red gown on her twenty-fifth day. However, on the thirty-seventh day her attention was given as earnestly to a dark blue garment, and Miss Shinn believed that it was the high light, and not the color, in both cases which was attractive. Similarly, on the forty-second day she showed persistent interest in a bunch of yellow chrysanthemums. As the child grew older there was some evidence that the warm colors were preferred to the cold colors, but there were not very wide differences. The appreciation of delicate colors is a slow development and throughout childhood relatively bright colors seem to have a particular appeal.

It is more difficult to determine a child's appreciation of form. Miss Shinn discovered that her niece seemed to prefer oblong blocks to squares, but thought possibly her appreciation of the oblongs was affected by the relative ease of handling them. The interest of the child in form, however, is of relatively slow growth, as are also any logical judgments of relative form. Children do not observe as many details in a given form as older people. The appreciation of detail in a picture is a matter for slow development, as will be shown in a later discussion of children's drawings.

While a child's appreciation of beauty is fragmentary, it is distinctly beyond the capabilities of any of the lower animals. The child lives in a very different world from that of any subhuman form of life. Just what the world is to a dog we do not know. Recent researches seem to justify the inference that dogs have little, if any, color vision. There is no evidence that a dog can appreciate the visual beauty of a landscape. It is enough for him that the sun is warm, that the air is clear and that there is a scent of wild game on the ground; he does not see beauty as a child does. A young woman recalling her childhood says, "I remember one rosebush which I felt was almost sacred because of its beauty, and whenever I was near it I almost did not dare to touch it."

VISUAL IMAGERY

It should not be supposed that a child's appreciation of a landscape is purely visual. Indeed, none of our visual experiences are isolated sensations of sight. Our appreciation of a snow scene is affected by our experiences with snow and similarly by a complicated mass of images involved in our previous experiences. A child's world, however, has very vivid visual elements. It is a world of objects and the child's mind reacts first in relation to these objective elements. It takes time to develop the subjective and inner appreciations of adolescent and adult life.

A child's ideas have to do with concrete experiences. Abstractions are difficult for children, a fact which many teachers fail to appreciate. All that a little child can do with many of our abstract conceptions is to translate them into something concrete and objective. The author has shown in another volume that the most complicated conception of which we know, the conception of God, is greatly modified in the minds of children.[1] Adults have much less of visual imagery in connection with their idea of God than children do. Children picture God as an old man or a young man, a being having some definite visual form, largely determined by the content of the teaching which adults have given.

But a child's visual imagery is not made up of detailed and accurate space relationships. It is characteristic of a child mind to grasp large units of a picture as wholes, or to hold in attention certain of the distinctly conspicuous elements as symbols of the thing pictured, rather than to grasp and appreciate its details. This is clearly illustrated in the representations of children's drawings which follow.

Children's drawings.—A child's first attempts at drawing can hardly be termed artistic, but they lead to the development of an art impulse. There is little distinction between the art impulse and the play impulse. A child's drawing is a sort of play. Perhaps the same thing may be said of the painting of an adult artist. Indeed, the artistic work of any craftsman, if it is successful, must have in it the spirit of play.

Several stages in the development of children's drawings have been observed. The first is the scribble stage, when a child amuses himself by covering a sheet of paper with scribbled lines. These scribbles are at first free and random movements of the pencil. It is interesting to know, however, that a child often interprets these scribbles as pictures, bidding his mother look at the man or the house which he has drawn. A little later comes another stage, when drawing becomes representative. A child of three or four may begin to represent forms in some general outline fashion. The earlier ones may look very much like random scrawls, but examination will show some kind of planned expression.

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[1] *The God-Experience,* Chaps. II and XVII.

In the early forms of children's drawings there is a distinct element of symbolism. By this I mean that certain lines or marks symbolize or stand for the characteristics of an object which the child notices. Thus, a line represents an arm of a man, a little square represents a window in a house. There is little appreciation of the actual appearance of arms or windows, but a very simple element serves as a symbol for these objects. In figure 1 there are two drawings by a child of four years and four months. The one on the left represents a boy. There is no distinction between head and body, evidently the head, in this child's mind, being the most noticeable and interesting part of the body. A straight line serves for a mouth, two dots for the nose, indicating that this child has observed the nostrils as essential elements in the nose, and two other dots serve for eyes. The lines representing arms are not symmetrically placed; two other lines represent legs, and the hands and feet are represented by little scrawls. The other drawing represents a girl and differs from the drawing of a boy only in the scrawl at the top of the head which the child said represented hair. It is an interesting feature of these two drawings that both of them were drawn upside down. It has been noticed that it seems to make very little difference to children which side is up in a picture presented to them. They see certain conspicuous elements in the pictures and have not yet developed a sense of space and direction.

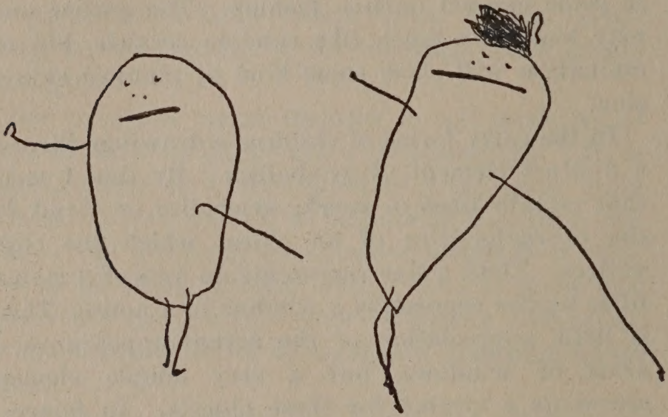

Figure 1

In the next type of drawing a child shows a further development of representative expressions (Figure 2). The head in a human figure is here distinguished from the body, and different elements are added to the picture, an eye becoming a crudely drawn circle rather than a dot, and the body frequently being represented by a circle or oval. It is noticeable that the average child at this stage has very little sense of relative position. Sully tells of a little girl who drew a picture of a cat, putting the circle which represented its eye actually outside the circle representing the head.

In many of these pictures the eye is absurdly large and the head perhaps as large as the rest of the body. In drawings such as these reproduced here it is noticeable that the elements in an object

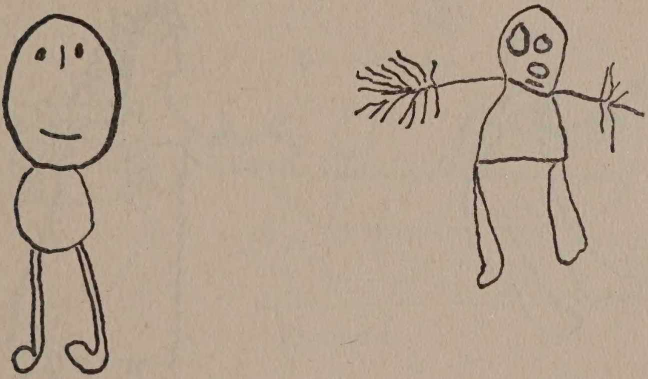

FIGURE 2

that have attracted the attention of a child are exaggerated. Frequently the only indication of a garment is in large circles representing buttons. Fingers of a hand may be made very large or the teeth occupy a large part of the drawing of a face. It has been noticed that when a child reaches the stage of adding the ears to a figure drawing they are apt to be disproportionately large and the introduction of new details is often emphasized by an exaggeration of their relative size.

As a somewhat later development, we have the profile view of a face (Figure 3), but it is frequently difficult for a child to distinguish the essential differences between the profile and a full-face view, so sometimes the profile showing the nose at one side of the drawing, shows both eyes and perhaps the mouth as in a full-faced figure.

Thus far in the development of a child's drawing there is little appreciation of the actual appearance of an object from a given point. The picture often includes elements which cannot be seen from a given point (Figure 4). An exterior view of a house often includes a figure of a boy or girl inside the house as though seen directly through the wall. In drawing a human figure very frequently the arms and legs are drawn in outline, then the lines of the garments are added, the young artist apparently seeing no incongruity in this process. A later stage

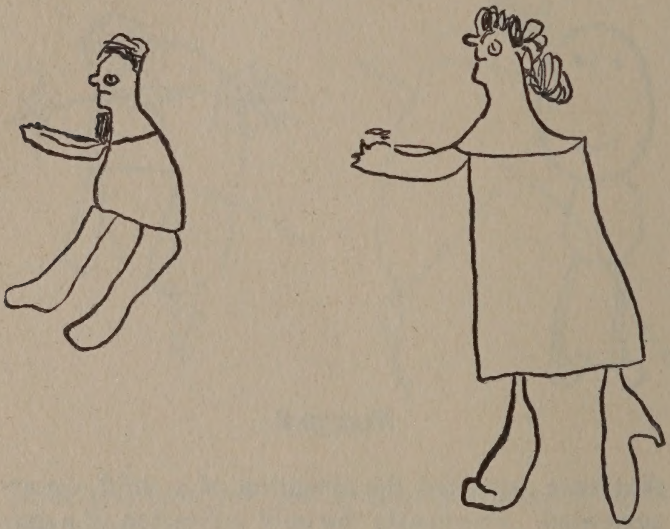

Figure 3

of drawing approaches somewhat closer to realism and represents space as well as lines more accurately. However, the conceptions of perspective and foreshortening are relatively small. In children's drawings, as in the drawings and paintings of primitive peoples, there is little appreciation of

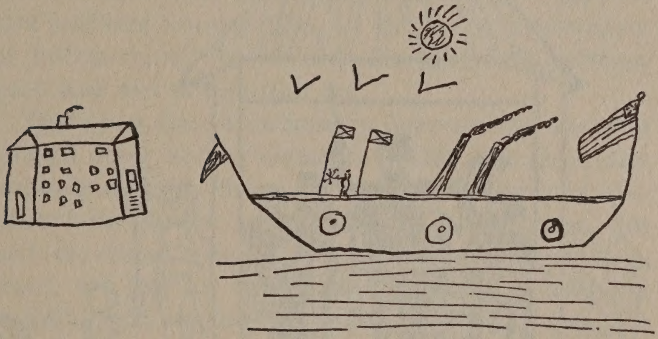

FIGURE 4

the laws of perspective. An ancient Egyptian painting of a pond with trees about it shows no sense of perspective and the pond can only be symbolized by a conventionalized rectangular figure. Ancient Chinese pictures show a similar lack of perspective, and the same failure to represent distance by relative size in a picture is characteristic of children's drawings. A still higher degree of development is shown in Figure 5. This is a drawing by a child of twelve, involving considerable action and detail. It will be seen that the space relations are still poor. Thus one ear of the drummer is on the level with his eyes, the other considerably higher.

A study of children's drawings is a study of the children's ideas and developing powers of observation. A child at first notices objects as wholes and then, perhaps when he first begins to draw, recognizes certain conspicuous elements in an object that may symbolize the object or parts of it. Later his observation extends to similar details, space relationships, accuracy of line and greater appreciation of color and brightness.

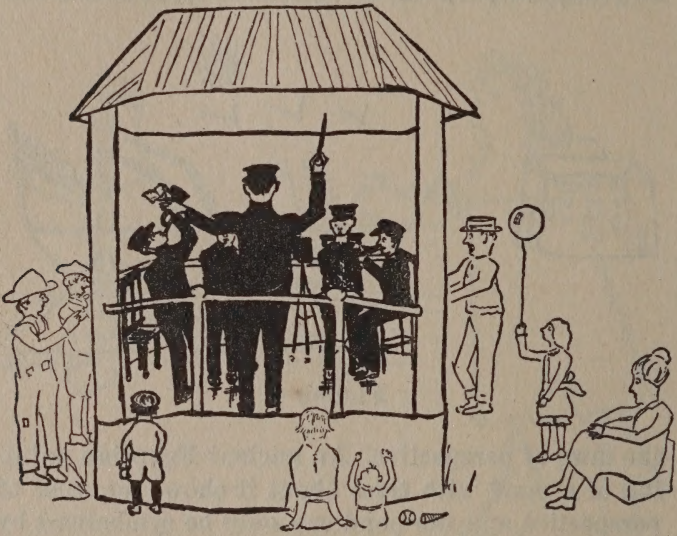

FIGURE 5

Developing appreciation.—While a child's ability to draw has been increasing, and there are very wide individual differences to be observed here, his appreciation of pictures, like his appreciation of natural scenery, has also been developing. From appreciation of crude color he grows to recognize delicate differences in colors and unconsciously to evaluate the composition of a picture, balance, beautiful line, effective masses of brightness and all other elements which go to distinguish good pictorial representation. The average child, like the average man, does not understand the principles of art and does not know why he prefers one picture to another, but, with the opportunity of seeing good pictures and with the favorable attitude of parents and teachers toward them, he will learn, consciously or unconsciously, to observe the difference between good and bad in pictorial art.

There is a close relationship between the fine arts and all other worthy elements in life. Pictures may not only serve to please boys and girls, but may also contribute to the meaning of a well-rounded life and character. Besides its more sensuous enjoyment, art has an ethical message and a religious meaning. It suggests to us other valuable elements in life. Its suggestive power depends upon its own nature and character. It is important in the education of our boys and girls that they have before them pictures that are nobly and worthily created. Such pictures should be in every schoolroom, in every home and in every church. This is not an impossibility, for good pictures are not necessarily original pictures. In these days, one can secure at very low prices excellent reproductions of the world's masterpieces of art. No home, church, or school is too poor to have a good picture. It is not essential that all our children become artists; indeed, it is not possible. But all our children should learn, so far as nature gives them capacity, to appreciate the beautiful not only in nature, but in works of art. Good pictures as the constant companions of boys and girls are of the highest value.

Musical Appreciation

The influence of music upon children may be noticed even in infancy. As early as the fifteenth day of her life one child who was under careful observation was pleased and quieted by the sound of whistling, and many infants have been seen to express pleasure when hearing music, at from one to two months. Miss Shinn reports that her little niece experienced "her first pleasant exercise through the sense of hearing," on the twenty-sixth day, when she ceased fretting and listened to the piano for five minutes.

Like all his other sensory experiences, the sounds which a child hears are at first a blend or blur, then sounds especially loud or unusual begin to attract his attention as separate noise. An infant responds very early to the unpleasant experience of an unusually loud sound. He also responds more pleasantly to soft voices and musical tones. We do not know to how great an extent he is able to distinguish between different pitches or qualities of tones or even between tones of slightly varying intensity, but the sounds which an infant hears apparently have very great influence upon his feelings and his disposition.

Attention.—It is difficult to learn to what extent a little child can fix and hold his attention upon musical sounds. In all of us attention comes in waves. We cannot hold our attention at a steady level for any length of time. These fluctuations are much more rapid in children than in adults. A group of little children in their schoolroom are singing a song. They sing for a short time with apparent interest, then their attention shifts to other things about the room even before the singing has ceased. One might wonder whether the song in which these children join so casually is having any influence upon them. We should not lose sight, however, of the significance of even the short period in which a song holds a child's attention. It is the nature of a child's mind to shift back and forth from one thing to another, and the music which a child hears may leave a very deep impression upon his mind.

Unconscious influence.—Children as well as adults are unconsciously affected by music. Even people with a minimum of musical appreciation are stimulated or depressed by the sounds which they hear. Martial music has an unconscious stimulation, and children as well as older people will find marching in a parade less tiresome if the band is playing. Féré, a French scientist, has shown that one can actually accomplish more physical work when hearing brass instruments than in silence and that a still greater stimulation to muscular effort is produced by the sound of drums. Children, like adults, are quieted or thrilled, are calmed or stimulated, through music, a fact which should influence the type of music which we allow our children to hear.

The unconscious influence of music upon little children is not always productive of pleasure. One man of middle age can recall a feeling of peculiar sadness with which he, in his childhood, heard music at a distance. A child at the age of one and one half or two years would invariably weep when, in a church or other public assembly, the organ began to play or the audience began to sing. The same reaction was observed when music was played on the phonograph, except that some very lively selections seemed to please her. This does not necessarily indicate a lack of capacity for musical appreciation. In fact, that child later showed a somewhat unusual appreciation. It is probable that this feeling of sadness produced by hearing good music is evidence of a distinct capacity for being affected by musical sounds.

Many adults can recall a feeling somewhat similar to those described above. One young woman says in describing her childhood: "I was passionately fond of music. Sometimes when mother played on the organ in the early twilight I would find myself crying." Another says: "My parents took me to church every Sunday, and every Sunday for over a year I cried when the music and singing began. . . . There was a quiet reverence in the church which impressed me with sadness, and it was deepened by the voice of the people and sound of the organ." It is well for us to notice that many of our adult appreciations of music are marked by "a feeling of sadness which is not akin to pain." An infant's only expression of such a feeling is in sobs and tears. In our adult experiences we find our pleasures and pains blended in our total experience so that it is not always possible to distinguish the pleasurable from the unpleasant elements.

The sense of rhythm.—Probably the first element in music to appeal to children is rhythm. In the growth of the race, rhythm is highly developed among primitive peoples before the development of harmony or even of melody. Some of the music of the American Indians is said to have a very complicated rhythm, although it employs few tones. The gypsy melodies which have so influenced the music of eastern Europe are often marked by complicated rhythm which affects the more elaborate music derived from it. Thus Dvorak's "Songs My Mother Taught Me" has the peculiar characteristic of being written in two tempos, the voice part in one tempo being paralleled by the piano part in another. An orchestra of Negroes attracted great attention in New York some time ago by the remarkable sense of rhythm displayed by its members. It is said that at least one of them could play two instruments with different rhythms simultaneously. The music of many primitive peoples seems to begin with instruments of percussion which are largely used for marking rhythms.

It is probable that the development of the individual in musical appreciation is somewhat like that which we observe in the race. A little child finds great enjoyment in a drum, a tin pan, or any similar musical toy. He shows pleasure in melody and distinguishes between different tunes considerably before he manifests appreciation for harmonious as over against discordant sounds. The developing abilities of children may suggest the order in which the various elements of musical training should be introduced.

Individual Variations.—Some degree of musical training should be recognized as the right of all. Good music should be available for the appreciation of every child. This does not mean that every child should become a professional musician, or even that every child should have an extensive musical training. It does mean that the musical training given should be adapted to the child's abilities. Probably all normal human beings have some native musical ability. The degree of this ability can be discovered relatively early in childhood. Many millions of dollars are spent in America on musical training of boys and girls who have little musical ability, while other boys and girls have no opportunity of developing their unusual musical capacities. It is particularly true of boys that through a mistaken notion that music is effeminate many of them do not discover the ability which they possess, while many girls and some boys are put through a long grind of piano or violin lessons although they have little ability for musical expression.

Of the greatest practical value to both these classes is the series of musical tests devised by Professor Carl E. Seashore, and developed in the psychological laboratory of the University of Iowa. These tests in a modified form are now available for schools wishing to discover the native musical capacities of their pupils. By their use one may discover whether a given child can profitably undertake anything more than the common musical training of the public school, or whether it would be wise for him to prepare for a professional musical career. The successful passing of this series of tests cannot guarantee success in music, but it can discover the natural possibility of musical expression. Some children have a very slight discrimination of pitch. Some lack an accurate sense of rhythm. There are wide variations in the ability to produce a tone of given pitch accurately with the voice, or to remember pitch, loudness, rhythm, and the other elements of music. The use of tests such as these is highly recommended by thorough students of the psychology of music. It would be a great advantage to all concerned if those to whom music is nothing but a weariness might find other types of æsthetic activity, while those who are music hungry might have every opportunity for the development of their talents.

Early training.—It is the testimony of many teachers of music that good early training is of the highest importance. There are some who think that a child in studying the piano or violin or vocal music can profitably acquire the fundamentals of such musical study from an inferior teacher and then secure a finished technique through a good instructor. But the good instructor very frequently finds that a large part of her work is to get rid of the handicaps of a previous teacher's poor instruction, for in musical education, as in any other, practice fixes in mind mistaken as well as desirable habits.

An important question with many parents is the age at which a child should begin the study of music. Some authorities on musical education state that a child should not begin piano study before six, the harp before eight or singing before nine, while violin study should begin even later. One should take account of individual variations and of mental development in judging the proper time for a child to begin the study of music. Here are a few profitable suggestions that have been made by various writers: The time for beginning music study should depend upon the child's health. Practice periods should be brief and should be repeated several times a day. It is very important that a child beginning to study music should have all possible opportunity to hear good music. His attention should be called to good music as it is performed, to its rhythm and the length, quality, and intensity of its tones. Children should be encouraged to sing by rote long before they learn to read music. The association of a song with the story which it tells and stories which are associated with it should be a stimulating feature of music teaching. It is particularly important that a child's voice should be protected from undue strain, especially at the period of puberty, when the voice is changing.

Music in the church school.—The church school should by all means contribute to good music for our children. Many of the songs which children sing in church schools are from a musical point of view disreputable and unworthy. They are not only of poor musical quality, but are inferior as literature and as expressions of religious feeling. One of the great needs of our day is a development of popular interest in good music, and this development must begin with the children. In the church school or in any other group children should not be subjected to music that has no real artistic merit and is not adapted to the worthy expression of emotion. Where children have the opportunity to hear good music and are given some training in producing it they find good music interesting. But in too many cases the child in the church school, and to a less degree in the public school, sings songs that are unnatural in sentiment and unworthy in musical appeal.

According to a somewhat crude classification there are three types of music—foot music, heart music, and head music. There is a place for all three in the musical appreciation of children—foot music, which has a distinct rhythm, such as is used in games and marching; heart music, which appeals to our sentiments and deeper feelings; and head music, which stimulates thought and is relatively complicated. Children appreciate the ballad music, which is distinctly music of the heart—serenades, lullabies, and folk songs. They can also appreciate music which is sometimes considered heavy and difficult, such as the Pilgrim's Chorus, for example, or the music of the Peer Gynt suite. The vocabulary of music for children is not a narrow one. They may be able to learn to sing only a relatively small variety of songs, and their range of musical abilities in playing an instrument may be equally limited, but their appreciation of the music of an orchestra or a great organ may be very great, even though this music is largely beyond their intellectual comprehension.

The Appreciation of Literature

There has been considerable publicity in recent years for the writings of gifted children. It would be profitable to study not only the literary expressions of precocious or unusual children, but the naïve and natural expressions of the average child. Children have an instinctive interest in rhythm and a tendency to speak or sing in some rhythmic form. A very young child frequently develops rhythmic babblings consisting of sounds otherwise insignificant repeated in rhythmic form. Thus one little child early in her third year was heard repeating over and over in a sing-song fashion words something like the following:

day-ga, daw-ga, day-ga,
day-ga, daw-ga, day-ga.

Another jingle or chant which she was heard repeating was as follows:

la, la, good-a-way,
la, la, good-a-way.

The development of rime seems to be considerably later in childhood than that of rhythm.

Children's poems.—The many recent collections of poems and other literary productions by children indicate that a considerable number of children have a distinct tendency to poetical expression. This does not necessarily mean that those children have an unusual or abnormal type of imagination, but rather that they are unusually capable of expressing the feelings and ideas of childhood. Most of these productions indicate a distinctly childish imagination. Probably most children have a similarly vivid imagination, but the majority cannot or are not encouraged to express it in any such way. A child of ten wrote the following spontaneous expressions of child imagination, showing a decided preference for rime:

MAY

"The sun is shining,
The sky is blue,
  'Tis oh, such a glorious day!
The bluebirds and the robins
In the tree tops are singing,
  For this is the month of May."

SPRING

"The tulips are yellow,
The violets are here,
  We see spring beauties arriving.
The grass is green,
The snow is all gone,
  And the lilacs for blossoms are striving."

Literature for our pupils.—Literature for our children and adolescent boys and girls should be chosen with the utmost care. If it is true that there is great educational value in artistic pictures and music, it is equally true that literature of high artistic value will be appreciated by our children if they are rightly directed to it. It is a deplorable fact that in these days of many books there are multitudes of children and young people reading utterly unworthy, if not dangerous, books and magazines. The way to improve their reading is to demonstrate for them the beauty and rich imagery and human interest of the higher types of literature. There is a great opportunity for parents and teachers to promote good reading, not as a task but as recreation. The prevalence of unwholesome comic strips and motion pictures, books and magazines is a challenge to us to provide the more desirable, more artistic and fundamentally more interesting literary art that will feed the growing spirits of our children.

PROBLEMS

1. List for each department of the church school the most valuable pictures of which you know. What will be the cost of good reproductions?

2. What is the cost of a good framed reproduc-

tion of Hofmann's picture of the boy Jesus in the Temple?

3. How many pictures are on the walls of your church school?

4. What is the value of flowers in the church or the church school?

5. What kind of music is used in your school?

6. Make a list of good hymns for the age-group with which you are working.

7. Can you test a church-school hymn effectively by reading it aloud?

8. What can your school do to promote the use of good music?

9. What books or magazines do your pupils read?

10. What can your school do to encourage the reading of good literature?

Books For Further Reading

Individuality and Education, Leighton, Chapter X.
Influencing Human Behavior, Overstreet, Chapter XLII.
Psychology for Teachers, La Rue, Chapter XI.
Essentials of Child Study, Luckey.
Studies of Childhood, Sully.
Introduction to Child Psychology, Waddle.
The Normal Child and Primary Education, Gesell.
The Exceptional Child, Groszmann.
How Children Learn, Freeman.
Notes on the Development of a Child, Shinn.
Our Enemy the Child, Agnes De Lima.
Creative Youth, Hughes Mearns.

CHAPTER IX

VARIETIES AND GROWTH OF PERSONALITY

There is a possible fallacy in the use of such terms as "the pupil" or "the child." While there are some general characteristics of humanity that will be found in all our pupils, it must not be forgotten that all of them differ from one another. The practical necessity of grading and classifying them does not relieve us from our obligation to treat them as individuals, each differing from all the others. Not only are there individual differences that demand our separate study of each of our pupils, but there are changes due to growth and development that make a child of five years very different in many respects from the same child grown to the age of eight.

Growth and Development

From birth to adult life there is a constant process of growth and development, both physical and mental. Physical development does not consist merely in growing larger. It is something more than a process of enlargement that takes place. The various parts of a child's body grow according to different rates. Thus, a little child has a relatively large head and very short arms and legs. As he grows older the proportions of the various parts of his body undergo characteristic changes. The head of an adult is relatively much smaller than that of a child, but the legs and arms are much larger and heavier. It is interesting to notice that there is less change in the relative proportion of the length of the trunk to the height of the body than in any other major measure, although the trunk of a little child is relatively somewhat longer than that of an adult. There are years of slow growth and years of rapid development. Growth is very rapid during the first few months of life. Then there is a gradual decrease of the rate of growth for some years, while about the beginning of adolescence there is another period of relatively rapid development.

Not only the muscles and long bones but all the organs of the body have their individual rates of growth. The liver, for example, is comparatively large in infancy, but it grows much more slowly than some other parts of the body, so that its relative weight is less at five years of age than in infancy. The other glands of the body are also developing according to different rates.

Just as important as the growth of all the parts of the body are their gradual adjustments so that they may work together in harmony. The growth of muscles and bones, for example, would not be so significant were there not a corresponding correlation between muscles and nerve centers. The little child learns to use the larger muscles of the body with considerable efficiency long before he can make the necessary correlations between the nerve centers controlling the small muscles. Hence, a child learns to run and jump and throw a ball long before it is able to write with a pencil or sew with a needle.

The various processes in physical development have their inevitable effects upon the child's mind. Perhaps you have noticed the awkwardness that seems associated with periods of rapid growth. Thus, the boy or girl of twelve or thirteen is growing rapidly and finds it difficult to adjust nervous energy and muscular movement to the new problems involved in lengthening bones and thickening muscles. The resulting physical awkwardness frequently reacts through a distressing self-consciousness that disappears only when the process of rapid and sometimes unsymmetrical growth has ended.

How our pupil differs from us.—It is important that every teacher of children or adolescents shall realize sympathetically the differences between herself and her pupils. Adults are apt to forget the physical and mental limitations of their earlier years and to overestimate the experience and information of their pupils, or, on the other hand, to underestimate the development of their powers and interest. It is an important thing for a teacher to realize that boys and girls at every stage of their lives are in considerable degree sensitive to any lack of appreciation of their personalities. No pupil should be treated as though he had no feelings or self-respect. Indeed, there is a very real sense in which a teacher should recognize the essential equality in real worth between her pupil and herself. Of course the pupil is immature and inexperienced, and it is important that the teacher shall know, so far as possible, the degree of this immaturity and inexperience; but the pupil is entitled to consideration as a person with personal feelings and a growing sense of dignity and responsibility.

The development of instincts.—The native tendencies of our pupils as well as their bodies undergo development. There are certain instinctive tendencies that appear at birth. Others are relatively latent until later in childhood or even in adolescence. The work of the teacher is to guide and harmonize and control these native tendencies in the interest of a total intellectual, moral, and spiritual development. It is important that we become acquainted with the native tendencies of our pupils and learn how to utilize these tendencies in the interest of the developing personality. For example, the instinctive tendencies related to sex develop in children long before the specific sex instincts are mature. Even in a little child there are characteristic types of attitudes that differ between boys and girls, and these should be considered in all our educational plans throughout the whole period of development.

Many parents and teachers are disturbed because little children are interested in matters of sex. In great degree this interest is due to the instinct of curiosity. It is important that the impulse of our children to learn be wholesomely gratified and directed at every point. It is not strange that a child who is full of curiosity about everything becomes curious over matters pertaining to sex. The more intelligent a child is the more curiosity he is certain to have. It is of vast importance that this curiosity be simply and wholesomely satisfied when it appears. Surrounding the subject of sex with mystery and abnormal secrecy really drives our children into unwholesome attitudes and encourages their becoming interested in information from unwholesome sources.

The teacher should be familiar with the development of sex interest in boys and girls. He should know that, while the sexes, as they approach puberty, apparently draw apart so that the boys and the girls constitute quite separate play groups, there is really in all boys and girls a developing interest in the opposite sex. This normally increases until in middle adolescence there is very commonly some sort of at least tentative courtship experience. Later adolescence is the period of love and romance *par excellence.* Parents and teachers should be familiar with these developments, sympathetic with the boys and girls, and as far as possible should seek to maintain a confidential relationship with those who are intrusted to their care.

Development in intelligence.—An examination of the pupils in your class is likely to show a wide distribution in intelligence as determined by such tests as the Binet-Simon or Terman tests or perhaps with less accuracy by school grades and marks. A distribution curve showing the intelligence of pupils in a large class might be something like the distribution indicated by figure 6. Many schools have adapted their system of grading to this relatively normal distribution. Of course a fair distribution of the pupils in your class may differ widely from this, but there is much to be said for a grading system that uses a small number of grades rather than attempting the close grading of the so-called "percentage" plan. According to the plan of grading suggested by the figure, a group of your best students, perhaps not more than one in twenty, will be given the highest grade, or "A." A somewhat larger group, above the average, will be graded

"B." Perhaps half of the class will be close enough to the average to be given the grade "C." A smaller number below average will be graded "D," while a very few of the poorest may be given the grade "E." No teacher should try to force her class into the proportions indicated by the figure. Some classes may have none who can rightfully be given the extreme grades, either "A" or "E."

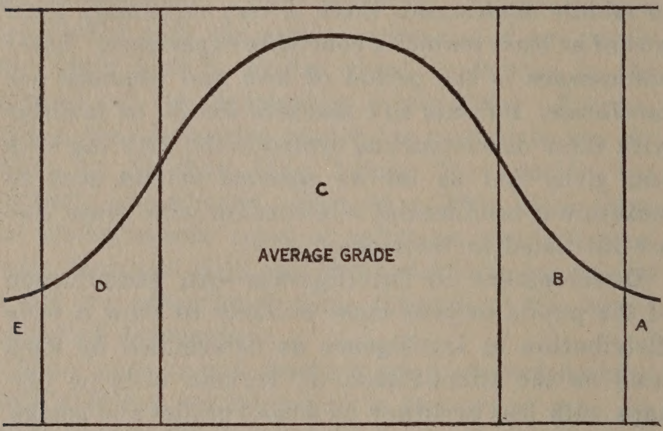

FIGURE 6

CLASS GRADE DISTRIBUTION

Intelligence tests.—Thus far the best-known system of intelligence tests is that of Binet and Simon as modified and applied by Professor Terman of Leland Stanford, Junior, University. The method they use is that of comparing the accomplishments of a given individual with those of children of different ages. There is a series of tests representing various age levels from early childhood to the age of sixteen. A child of ten, for example, may be able to pass the test that indicates the mental ability of an average child of twelve. This being the case, we say that he has "the mental age of twelve." If, on the other hand, he passes only the tests up to and including that marking the intelligence of the average child of eight, he is said to have a mental age of eight. An adult, or a boy or girl over sixteen, whose mental age is from eight to twelve is considered a moron or a person of high-grade feeble-mindedness. To some extent the Binet tests may be used to measure the various degrees of supra-normality or unusually high intelligence.

There are a vast number of educational problems involved in the various levels of mental ability. We have special schools for feeble-minded children and now are beginning to give some special attention to the supra-normal who have been largely neglected in behalf of the great body of average pupils. During the past few years there has been a great deal of experimenting with mental measurements. There is much yet to be accomplished before we have an ideal scale, but these experiments are valuable in working out educational problems. The extensive psychological tests used in the army during the World War seem to indicate that the average mental age of the enlisted American soldiers was between thirteen and fourteen years.

Mention should be made of another term that is coming to be used more frequently than mental age. This is the intelligence quotient, commonly abbreviated as the I.Q. This is the ratio of mental age to chronological age, expressing this quotient in terms of per cent. Absolute normality is represented by an I.Q. of 100 per cent. According to Professor Terman, intelligence quotients may be classified as follows:

I.Q. of over 140	Genius or "near genius."
120-140	Very superior intelligence.
110-120	Superior intelligence.
90-110	Normal intelligence.
80-90	Dullness.
70-80	Border-line deficiency.
Below 70	Definite feeble-mindedness.

The broadening world.—Our understanding of our pupils will be enhanced as we study the effects of the mass of experiences that combine to develop their knowledge of the world as they grow from infancy to adulthood. The little child begins life with very vague and hazy perceptions of the environment in which he finds himself. He must learn from the very beginning the language and customs of the society in which he happens to be born. He must acquire the skills and historical knowledge of his people. At first his world is necessarily narrow. His horizon recedes from the house-wall to the street, then to the end of the street, then to the next village or city. When he begins to learn of other States and countries, he has already made considerable progress as a geographer. The significance of the earliest years for education can hardly be overestimated. Throughout childhood and adolescence there is normally a constant enrichment of experience. Associations and meanings are multiplied, imagination and the powers of thought are unfolded, there is constant growth in æsthetic, personal, and religious appreciation, and the moral and religious consciousness attains to ever new achievements.

Social development.—One of the most interesting phases of child development is the growth of the social interests and impulses. The infant is almost infinitely removed from the unselfish love that his mother returns. His smiles and caresses are similar in motive to the purr with which the cat rewards our stroking of his fur. Of the sacrificial anxiety of his parents he knows nothing, nor cares. But he has within him the potency of social interest. His acquaintance with persons broadens gradually to include father, brothers and sisters and other relatives, other children and, in adolescence, a very complex series of group relationships. As even at birth there are the beginnings of social impulses, so in adult life there should be some remnant of individualistic impulses. It would not be desirable to become solely interested in others and lose one's self-respect or self-regard altogether. But the general trend of development in a Christian environment should be marked by a growing interest in the social world that summons our boys and girls to prefer others rather than themselves and give themselves unselfishly to lives of service.

Childhood and Adolescence

The developments of childhood and adolescence constitute a relatively regular progress. There are, to be sure, certain periods of more rapid change, such as the pubertal or early adolescent period, but even these spurts are changes in the rates and relative emphases of continuous processes. Powers and capacities appearing in childhood develop at varying rates, but keep on developing until they attain maturity. What marks the periods of development is not so much the nature of given traits as the degree of their development.

Pre-school and kindergarten children.—Nothing is farther from the truth than the idea that early childhood should be allowed to be a period of unguided growth. Perhaps there is no age more important to the development of good habits and attitudes. During this time a child is learning the rudiments of his mother tongue and of the demands and conditions of social living. The relations now established toward father and mother, sister and brother, neighbors and friends, will in great degree affect the ease with which later social adjustments are made. It should be remembered that in the midst of the bewildering mass of sights, sounds, and other experiences, the little child's most vivid interest and attention are given to persons.

Primary and junior children.—The child of the lower grades is suggestible. He is interested in older persons and eager to imitate their activities. He is interested in learning to read and write and draw pictures. He is a keen observer of the persons about him. With the coming of the junior years he is becoming more self-reliant and increasingly aware of his own powers. He becomes more ambitious for personal achievement. At the same time his appreciation of others is increasing. He is more keenly sympathetic in his attitudes toward others who are suffering and in trouble. At the same time he loves to tease other children or even to cause pain, and he may seem quite heartless in his revolt against the dictates of parents and teachers. His quarrels and fights present serious disciplinary problems. But beneath his careless behavior is a growing social consciousness that can be directed into the ways of sympathetic service.

Early adolescence.—The appearance of puberty at the age of twelve to fourteen is marked by relatively rapid physical developments, together with related mental changes. Not only the sex organs but the whole body undergoes marked development. The muscular system grows rapidly. The heart increases rapidly both in size and in strength and all the other organs are involved in the general development. The social consciousness that has been developing throughout childhood is greatly heightened. Relatively new impulses appear and perplex the boy or girl with their vague promptings. Life is a puzzling and complex affair to the boys and girls who are passing through this trying period. However, they are physically vigorous and normally amenable to sympathetic and intelligent suggestion.

Middle and later adolescence.—Middle adolescence, from fifteen to seventeen, sees the final development in stature and the general maturing of the bony framework of the body. At the same time the muscles are developing and the whole body approaches its adult organization. Intellectual capacities of all sorts attain a high development, although it remains for experience and practice to make them fully efficient. The social nature reaches a development impossible in any earlier period, the appeal of the opposite sex becomes strong, and the personality becomes extended and merged in various social groups. Later adolescence, from about eighteen to perhaps twenty-four, is a period of fixing the skills, habits, and attitudes that have been developing and establishing the adjustments of ideals that are likely to dominate all later life.

The entire period of adolescence is a time of high physical, intellectual, and emotional energy. It sees the heightening or intensifying of many impulses, some of which seem opposed to one another. For many boys and girls whose childhood has not been guided to make the needed and possible preparation, it is a period of stress and strain, of perplexing problems and difficult adjustments. With a wholesome environment and with the intelligent and sympathetic encouragement of older persons, adolescence flowers into the broad social interests, the high ideals, the enthusiasm for noble causes, and the balance and poise that make the early years of maturity so fruitful for social progress.

Individual Differences

Educators have tried long and hard to treat their pupils as though they were alike. We have attempted to classify them, to group and grade them by various tests and measurements. Some of these tests have proved very valuable. Of course we must deal with our pupils in groups and apply some sort of standards to their conduct and activities, but an important fact that must never be forgotten is that our pupils are widely different from one another. Your class probably consists of pupils all drawn from a similar social rank or class. They have had similar opportunities and very likely are a somewhat select group. They do not represent the general averages and levels of our population. Your group, in other words, is a more homogeneous group than is likely to be found in the public schools. In spite of all this, you can distinguish wide individual variations. There are distinct differences in such physical characteristics as stature, complexion, shape of head, and the relation of weight to height. Besides these more apparent physical differences you can distinguish wide differences in personal dispositions and tendencies.

Causes of differences.—The causes of many individual differences may be so obscure that we cannot trace them, but there are some clearly apparent general causes.

1. *Biological heredity.* The significance of heredity is easily recognized in the case of physical differences. It is not so easy to distinguish the hereditary element in mental differences. However, the mental nature of an individual pupil is very closely correlated with the physical nature of that pupil. Turn back to page 25 for a further discussion of heredity.

2. *Social heredity.* The effect of environment is another very important cause of individual differences. It makes a great difference into what social group one is born. Nature does not provide us with a language, but only with a tendency to speak, and we naturally acquire the language of our parents. We also acquire the social customs and modes of thought that are involved in their social environment. Our relation to institutions is very largely because of social heredity. We are members of a particular religious denomination not because we have carefully compared and considered the various faiths, but because we have followed in the customs and practices of our parents or the customs and

practices of the community in which they brought us up. How widely do your pupils differ from one another in social background and experience?

3. *Maturity.* There are wide differences between pupils in our schools, due to their differences in age or rate of development. Even in a small class you will commonly find pupils whose "mental age" is above the average, and other pupils whose "mental age" is noticeably below the average. You will find too that the rate of physical development is different in children and young people of any given chronological age. As an example, the changes incident to puberty vary decidedly with individuals, so that one boy or girl at the age of twelve may be physically and emotionally developed far beyond another pupil of the same mental or chronological age.[1]

4. *Present environment and training.* Aside from the elements of past environment which have been discussed under "Social Heredity," there are wide differences in the present environments of our pupils. Their home conditions differ. The attitudes of their parents toward their activities probably differ very decidedly. Perhaps they go to different schools. At any rate their present environmental conditions are more or less different and should be taken into consideration in any careful evaluation of their nature and needs.

5. *Sex.* The differences in physical and mental powers between the sexes have been greatly misunderstood, and in many cases exaggerated. But there is need for recognition of such differences as

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[1] See Moxcey's *Psychology of Middle Adolescence*, Chap. V, for a clear treatment of individual differences in mental development.

actually exist. The reason for separating working groups of boys and girls in later childhood and early adolescence is that during these periods they feel a special desire for organization in separate classes. In general, a normal educational situation involves the grouping of boys and girls together, just as a normal home situation involves the association of boys and girls. So the school should bring the sexes into wholesome and proper association.[2] There should be a degree of co-operation between boys and girls at all periods of their development to avoid the abnormal and sometimes morbid sex attitudes that may otherwise develop.

Temperamental differences.—While our pupils are all different from one another, it is possible to classify the differences in more or less accurate ways that are workably useful. Emotion, will, intellectual interests, and a great number of other mental characteristics are found to be related in general groups that have been recognized as a basis of classification since the days of the ancient Greeks. In Aristotle's day persons were classified according to four temperaments; the *sanguine,* the *choleric,* the *melancholic,* and the *phlegmatic.* It is an interesting comment on the science of that time that names of these temperaments are derived from certain fluids in the body which were supposed to modify mental states as one or another was dominant in a given organism. In our day we have learned that while blood and bile, and other fluids of the body, have a vital relation to our physical and mental states, the differences of temperament are far too complicated for so simple a classification. One of the most satisfactory classifications of temperamental differences, although it is by no means sufficient, is that of Wundt. He recognizes four temperaments that correspond rather closely to the four temperaments of the ancient philosophers. This classification is based upon the fact that our mental and nervous reactions differ in readiness or quickness, and also in strength or energy. According to this system, we have the temperament that may be called the *prompt-strong,* that corresponds to the choleric; the *prompt-weak,* corresponding to the sanguine; the *slow-strong,* corresponding to the phlegmatic, and the *slow-weak,* corresponding to the melancholic. It must be recognized that no simple classification of temperaments is sufficient to account for the large number of types.

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[2] See Moxcey, *Psychology of Middle Adolescence,* pp. 108-118.

The practical value of this recognition of temperaments is in its help to our understanding of the wide variations in our pupils. They are not all alike and consequently they will not respond in the same way to the same treatment. As workers in religious education it is important for us to realize that the end and aim of our work is the development in our pupils of a vital and active religious experience; but since our pupils differ in temperament, we need not expect that this experience will be in all cases the same. It has been shown by many students of religion that experiences differ widely according to temperament. This is very clearly shown in the studies of Coe, in his very significant book, *The Spiritual Life.* In this he presents a study of a group of people, some of whom expected a vivid conversion experience and received it. Others expected this experience, but did not receive it. He found that, according to careful tests, the first group showed decided temperamental differences from the second group, which seemed to indicate that a vivid conversion experience is possible to certain types of temperament, but not to others. Of course this does not mean that a religious transformation is limited to one type of temperament, but rather that its nature and expression will differ according to temperament.

PROBLEMS

1. Make a list of the general characteristics of the age-group with which you are working.
2. How do your pupils differ in the social background indicated by their homes, public-school training, and the communities where they have lived?
3. How do pupils in the various departments of your school differ from one another in their attitudes toward the opposite sex?
4. For your own information, grade the work of your pupils into the five classifications indicated on page 150.
5. Have you any supra-normal pupils? What problems do they present?
6. Do you regard any of your pupils as sub-normal?
7. Whom do you have more distinctly in mind in your teaching; your brightest pupil or the average pupil?
8. Make a list of traits that are normally characteristic of (*a*)kindergarten children, (*b*) primary

children, (*c*) juniors, (*d*) intermediate or junior high school boys and girls, (*e*) senior high school students, (*f*) young people over eighteen years of age.

9. Can you classify the pupils in your class according to the four temperaments given by Wundt?

10. What reasons can you discover why the people in the world are not all alike?

11. Make a list of questions about peculiarities of individual behavior that you would like answered. Present these questions to the training class for discussion.

12. How do your pupils differ in their taste for—
    (*a*) Literature?
    (*b*) Music?
    (*c*) Pictures?

13. Do you think that any members of your class are sufficiently different from others in mental ability or emotional nature to require special individual attention or need to have work specially planned for them?

14. Have you taken into account in your own teaching the social causes of personal difficulties of your pupils? Are you acquainted with the conditions in their homes and with the other environmental factors in their lives?

Books For Further Reading

The Spiritual Life, Coe, Chapter III.

The Psychology of Middle Adolescence, Moxcey, Chapter V.

Psychology for Teachers, La Rue, Chapter XVI.

Principles of Secondary Education, Inglis, Chapter III.

The Exceptional Child, Groszmann.

A Study of the Little Child, Whitley, Chapter IX.

A Study of the Primary Child, Whitley, Chapter IX.

A Study of the Junior Child, Whitley, Chapters IV and IX.

The Psychology of Early Adolescence, Mudge, Chapters II and VII.

The Psychology of Middle Adolescence, Moxcey, Chapters V and IX.

The Psychology of Later Adolescence, Mudge, Chapters II and VIII.

Leaders of Youth, Harris, Chapters IV and V.

Readings in Educational Psychology, Skinner, Gast, and Skinner, Chapter XXI.

Introduction to Psychology, Seashore, Chapter XXIV.

A Social Theory of Religious Education, Coe, Chapter IV.

Childhood and Character, Hartshorne, Chapter VI.

Child Psychology and Religious Education, Wilson, Chapter II.

CHAPTER X

MORAL LIFE AND EXPERIENCE

CHILDREN are born neither moral nor immoral. They are non-moral, for morality develops out of social relationships which cannot be recognized by children until they have had a degree of experience in social life. In a sense children have morality thrust upon them, for they must learn to adjust themselves to a system of morals which they themselves have not developed, but which has come from the experience, the ideas, and the customs of the race. There are, however, in every child tendencies leading to the development of morality. There is in human nature that which the philosopher Kant describes as the "categorical imperative," a tendency, developing slowly but surely, to recognize obligation. It is normal for children to develop a sense of "oughtness," of responsibility, of difference between good and bad, between the thing that should be done and the thing that should not be done.

The social nature of morality.—But the development of this sense of obligation requires time and experience, for the building up of even a crude system of morals is dependent upon a child's experience with social life. Morality is essentially social. It has to do with relations of persons with one another. In the life of infancy the individualistic instincts are dominant. The infant is at first self-centered, and as long as he remains so the very basis of morality is lacking, but even in infancy and early childhood there are the beginnings of altruistic impulses. There is developing an interest in other personalities which continues to grow until in later childhood there is normally a very distinct sympathy for the suffering of individuals and a very active affection for parents and other friends. It remains for the experiences and developmental processes of adolescence to develop the broad social interest, the devotion to the welfare of greater or smaller groups of people, which is characteristic of normal adult life.

Since the altruistic impulses are practically lacking in infancy and are developed by social experience, it is clear that the training of social impulses has a very important place in early education. A child begins very early in life the development of the attitudes which are essential to character. One of the most remarkable facts of child development is the extent of a child's learning during the first five years of life. No other equal period in life can show any such relative growth in knowledge. By the time a child is five he has acquired a working knowledge of his mother-tongue, he has learned a vast number of facts about the world of his immediate experience and he has developed habits of behavior that will powerfully affect his moral development throughout his life.

Child egoism.—In early childhood the world centers in a child's own personality. He is an egoist and it will be some time before any code of social conduct can be anything but externally administered rules. His ideas of conduct come from without. He is beginning to distinguish between right and wrong, but right is the thing which is permitted and wrong is the thing of which parents or teachers disapprove. There is no such development of principles as one finds in later childhood or in adolescence. A young woman thus described the self-centered nature of her childhood: "In the plays of my childhood I always wanted to take the part in which I could have the other children under my dominating spirit, the part in which I could exercise my love of power. I somehow had an idea that I was indispensable to my surroundings and that I had only to speak the word and my wish would be granted. One instance I remember which occurred during my fifth year. There was a little boy with whom I liked to play better than any of the other children. We lived several squares distant from each other (a distance which to me seemed miles) and so could not play together every day. I planned that in order to have him with me all the time I might be able to buy him from his father. Without telling my parents of my plan I stopped the little boy's father as he was passing the house one day and made my wish known, expecting my demand to be gratified. With me I had five cents which seemed to me to be an ample amount to make the purchase. I could not see the necessity of all the argument which followed, and when he finally refused my money and refused me the little boy I was furious and for a long time afterward would have nothing to do with the man."[1]

Social development.—As children grow older they become increasingly familiar with the conventional requirements of civilized life both for adults and for children. Obedience is of necessity an important virtue in childhood, but there should be increasing opportunity for the exercise of initiative. The development of morality depends upon free choice and the recognition of personal responsibility, and these cannot be developed under a regime of mere force. It is in the nature of childhood to demand more and more liberty in initiative and to insist increasingly upon understanding the reasons for rules and regulations.

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[1] For an account of the abnormal continuance of the attitudes of childhood or adolescence into adult life see Overstreet's *About Ourselves*, especially Chap. II.

A noticeable characteristic of the morality of childhood is found in its active nature. Children are not concerned with abstract principles of justice or of right and wrong. They are interested in concrete situations and in individuals. Early in childhood they have tendencies toward sympathy for individual suffering and an appreciation of the individual satisfaction of others. It is possible to stimulate those altruistic impulses by systematically planning a program of service activities for others. It is important that children as soon as possible develop a sense of social responsibility, that they be encouraged to do things for others, to give money to worthy causes, and to engage in a variety of activities in which others participate.

The morality of child life is not the morality of adult life. The chief virtues of childhood are such as loyalty, honor, honesty, thrift, courage, obedience, self-confidence, generosity, punctuality, cheerfulness, kindness, and courtesy. It should be remembered that a child's morality is necessarily affected by the nature of the world of imagination and impulse in which he lives.

Moral development in adolescence.—Normal adolescence witnesses a great development of the social impulses. The consciousness of relation to social groups that has been developing throughout childhood now becomes more distinct. As our adolescent pupil becomes increasingly conscious of his own personality and its significance, he also becomes aware of new relationships toward others. With careful training, he normally becomes more altruistic. His growing moral life is deeply affected by the new social groups to which he attaches himself—the gangs, clubs, and various social groups that call upon him for loyalty and co-operative action. It should be remembered that the attitudes of childhood are not suddenly abandoned. They are gradually outgrown and hence we shall often observe a mixture of attitudes and motives.[2]

Loyalty.—A virtue of great importance among children is that sense of loyalty to one's friends or one's group which develops into a sense of honor. It is characteristic of children who have reached the age of middle or later childhood that they feel a certain obligation to one another or to the group with which they are identified. To the average boy of ten it is a distinct infraction of his moral code to give information to parents, teachers, or other adult authorities concerning the misdoings of his schoolmates or playmates. This principle is likely to continue into adolescence. In adult life, however, the giving of information concerning the wrongdoing of others is often considered a virtue and hence we, as teachers and parents, may consider the persistent refusal of our pupils to give such information as mere willfulness or stubbornness.

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[2] See *The Psychology of Early Adolescence*, Mudge, p. 94.

The social nature of our pupils brings them together in later childhood in gangs or cliques, more or less organized groups, which continue to function most characteristically in early adolescence. There is for boys of this period a very great interest in the stories of knighthood and the virtues which were characteristic of medieval chivalry. Hence, biography, poetry, and fiction emphasizing chivalric elements of life and service for others are of great value. Hero tales make a very deep appeal, whether the heroes involved be worthy or not. Consider how very important it is that our pupils be given in their later childhood and early adolescence stories that appeal to the imagination and carry a spirit of loyalty and honor.

Honesty and truthfulness.—Honesty is a development. Children must learn something of the significance of property and the confidence which one person places in another before they can have any conception of the meaning of honesty. Much of the supposed untruthfulness in children is the product of a vivid imagination. Many of the so-called "children's lies" are really the expressions of a very vivid imagination. In early childhood it is very difficult for a child to distinguish between a fanciful story and a story of actual happenings, difficult perhaps to distinguish between the actual occurrences of the day and the dreams of the night, so it is not surprising that little children frequently describe events which older people know have not occurred at all, as though they were actual happenings. Sometimes the nucleus of such a story is a slight basis of actual fact. Thus a child sees two or three horses running in a field and reports to his mother that he has seen a hundred horses running in a field.

A little investigation into the reports which older people make will throw some light on this type of exaggeration. The average adult is relatively untrustworthy in reporting events. Every criminal lawyer knows how difficult it is to secure from witnesses a reliable statement of fact. If the observation and memory of adults is lacking in dependability, surely it is not surprising that children frequently exaggerate and misrepresent the things which they have observed. To be sure, there is an important moral problem involved in teaching children the distinction between fact and fancy. In middle childhood this distinction should be made clear. It is easy, in telling children stories or reading them stories, to make this distinction, and parents and teachers should indicate their recognition of a difference between fairy stories or fables and matters of actual fact. We may do this without charging the children with falsehoods or calling their misrepresentations lies.

Another reason for the untruthfulness of children is fear. In avoiding punishment they frequently misrepresent their own wrongdoing. In fact, this is one argument against corporal punishment, except in very unusual cases, for the use of such punishment tends to intensify a child's fear and in many cases to develop a habit of misrepresentation. Many children become habitually deceitful through their fear of punishment. A university professor tells of a boy who told an unbelievable tale in order to cover up some wrongdoing, a story which became with its repetition more and more incredible. The method used in attracting the attention of the boy to this fault was the telling of a still more unbelievable story. When the boy expressed incredulity, he was asked if his story was not as truly unbelievable.

Courage.—Another virtue which should be stimulated in childhood is courage. We may make a deep appeal to the courageous spirit of children through stories describing men and women, boys and girls who show a high degree of courage in situations comparable to those that the children themselves find difficult. Children appreciate approbation, and it means much for older people to praise their courageous acts or their self-restraint when they suffer pain. It is far better to praise them when they are courageous than to blame them for showing cowardice.

Thrift.—Quite early in their childhood we may begin to develop in our children a habit of thrift. A sense of property is developed very early. On the basis of the interest in ownership we may develop a recognition of the value of property and a habit of saving. This, of course, involves that a child should have some property of his own. The value of property is best taught to a child by giving him an opportunity to earn money. To many children money has little value because they have no sense of the difficulties involved in earning it. If coins are given children whenever they ask for them, there is developed a questionable attitude toward money and other property, while if they know by experience what money means they are much more likely to value it and save it. A woman recalling her later childhood says that her teacher once asked the pupils to earn some missionary money. The child volunteered to make paper roses and the teacher agreed to buy them. When the mother was told of this plan she said, "If you want any money, I will give you what you want, but you are not going to work for it." The child has grown to womanhood, but the sad rebuff to her generous impulse is still remembered. Thrift and generosity should be parallel virtues in the development of moral habits in childhood. The value of money should be measured both by its cost in labor and by the amount of service for others it will make possible. For instance, a child may learn the value of a dime by the time and labor necessary to earn one, or by its spending value in chewing gum or candy or in a day's supply of milk for a sick child.

Kindness.—Kindness to other people and to animals is an important virtue for children to attain. Much of what we call cruelty in children is no doubt due to curiosity and a variety of natural impulses, combined with ignorance of the effects of their actions. Early education certainly should include a familiarity with pets and other animals. It is in the nature of children to tease and in some circumstances actually to be cruel to other children, but early association with sympathetic people and encouragement whenever they manifest kindly attitudes will do much to prevent their becoming the little bullies who so often distress older people.

Courtesy.—Courtesy is closely related to kindness. In the development of courteous attitudes much depends upon the example of older people.

There are various rules of behavior which must be meaningless in early childhood, but as children grow older the development of voluntary and intelligent habits of personal cleanliness, consideration for others and courtesy to everyone is very important. We cannot expect the little child to be a model of courtesy or the boy of eight to be an immaculate young gentleman. Children observe the attitudes of their elders toward one another, and if there is a lack of courtesy in the home or in the schoolroom, it will be reflected in the children. Parents and children should not only be courteous to other adults but to the children themselves. If we discover that we have been unjust to children, it is of the greatest importance that we apologize. How otherwise can we expect them to apologize or readjust their own attitudes when they are in the wrong?

The Relation of Childhood to Sex

No conception is more important to parents or teachers than that of the place of sex in the development of any worthy and beautiful personality. The instincts related to the sex life are fundamental to all that is noblest in human character. They are at the basis of family life, and through the various family relationships have affected all our social customs, our æsthetic appreciation, and even our highest moral and religious attitudes. There is still a vast amount of absurd thinking about this subject. We consider the word itself undignified or vulgar. We separate the impulses and processes involved in it from all other natural processes as something not to be discussed. This has resulted in a strange hesitation to answer any of the questions about sex which are stimulated by the curiosity of childhood. The result of this exaggerated mental modesty has been and still is one of the most serious defects in our education of children.

Sex differences.—Sex is not merely an anatomical or physiological difference. At least in human beings it is the cause of mental and temperamental variations which are of the highest importance in the development of life and character. Some have thought that the instincts of sex are delayed instincts, because their more positive characteristics appear with relative suddenness in adolescence. Recent physiological observation has shown that this is not the case. The characteristic attitudes, appreciations, dispositions and tendencies differentiated by sex are matters of slow growth and date from early childhood or even from infancy. Not only can differences in physical organization be distinguished even in infants, but certain differences in mental reactions between boys and girls may be observed very early in childhood. Thus the father who says proudly of his baby boy, "He is a real boy," observes certain physical and mental characteristics which distinguish him from the little daughter who shows traits which we recognize as feminine.

These differences are distinguished by the boys and girls themselves early in childhood, so that there is a certain attitude of a child toward another child of the opposite sex different from that toward children of the same sex. Of course this is less noticeable in the early periods than later, but it is observable very early. This characteristic attitude should not be confused with a courtship attitude such as appears in adolescence. It is a relatively unconscious attitude, the natural development of a sense of sex differences. There are, however, complicating factors due to the stimulation of sex-consciousness by adult suggestion. Precocious attitudes are frequently due, at least in part, to defensive reactions against the ridicule or teasing of adults or of other boys and girls whose attitudes may be traced to adult influence.

With middle and later childhood there develops a distinct group consciousness which leads the boys to play in groups of boys, and girls to form their own groups. Possibly social customs and educational methods somewhat contribute to this feeling of difference, but there gradually develops a tendency which has been called sex repulsion, culminating in later childhood or early adolescence. At this period each sex seems to sustain an attitude of scorn or disdain toward the other. This attitude, however, is not a real repulsion; it is an evidence of a growing consciousness of sex. Possibly it may mean an increasing interest of boys or girls in those of the opposite sex. The boy of twelve who most loudly expresses his scorn for girls may be the same boy who performs strange acrobatic feats in the hope of winning the approbation of some favorite miss, while the girl of the same age who says mean things about boys has her secret admirations among the boys of her acquaintance. These are natural attitudes leading to the period of the first tentative advances of boys and girls toward one another in early or middle adolescence, and toward the true courtship period of later adolescence.

It is a deplorable fact that misinformation concerning sex and unworthy attitudes toward sex are commonly developed during childhood. Frequently this mal-education comes in very improper form from questionable sources. It is the testimony of those who have studied the problems of sexual delinquency that a large proportion of those who are detected in such delinquencies in later life began questionable practices early in adolescence and some of them even in childhood.

Related Factors.—It should be remembered that there are other instincts than those of sex involved in this problem in dealing with children. A very notable characteristic of childhood is curiosity. There are matters pertaining to sex which children naturally and normally wish to know. If they do not receive this information wholesomely from good sources, they are almost certain to receive it from less desirable sources and in perverted form or utter misrepresentation. Unwholesome ideas concerning sex may come very early through older boys and girls or through adults who are morally and mentally perverted.

The associates of our children should be chosen with great care, especially those who are older than they themselves are. I do not mean that children should be limited to a very narrow circle of acquaintances, but that there should be thorough supervision of their whole social environment.

An educational problem.—The prevention of unwholesome attitudes and the development of a wholesome mental reaction toward sex is one of the most important problems in education. How can we secure the most natural and efficient type of education in relation to sex? A chief element in moral education is provided by example rather than precept. It is very important that the highest ideals of personal character be presented to our children by their parents, teachers, and other adult acquaintances. Above all it is important that the attitudes of parents toward each other be such as rightly to guide the feelings of boys and girls in relation to life and the problems of sex and parenthood. In only a less degree it is important that the attitudes of all older people be wholesome and worthy. When boys and girls observe unwholesome relationships between men and women, or between older boys and girls, when they see families broken or husbands and wives quarreling and unhappy in their married life, when they observe men and boys discourteous and unchivalrous toward women and girls, or when they see girls and women cynical and disrespectful in their attitudes toward boys and men, is it any wonder that children develop similar attitudes themselves? An important element in sex education is certainly the courtesy shown by men and women toward one another.

Another source of teaching which has its bearing upon sex education is literature. It is important that boys and girls find in the literature which they read, in stories and poems and biography and history, examples of noble character in men and women. Part of the reading of girls should be books which show nobility of character in men, and similarly boys should read books which describe women of high moral character and personality. There is the possibility of serious moral harm in the book, the play, or the motion picture which scoffs at the family relationship or tends to develop unworthy social attitudes. Certainly, parents and teachers should censor the reading and the motion pictures of their children to the extent of providing a wholesome type of stories and pictures for them. Parents should also discuss freely with their children the wrong attitudes and actual sins that come within the observation of the children. Such conversation is of the highest importance in developing moral judgment.

Another important educational aid is in the guidance of our boys and girls in their attitudes toward nature. It is well for children that they observe the life of birds and animals about them, the differences due to secondary sexual characteristics, such as the plumage of birds, as well as the habits of mating and nesting and a multitude of other natural processes which may sometime be related to the processes of human sex life. For a child to become acquainted with the life of the fields and woods or, if he must live in the city, with the animal life of the zoological garden, is to secure an opportunity for developing wholesome attitudes toward the wonderful processes of nature.

Another important factor in the development of worthy sex attitudes is involved in play and physical training. The child may learn through games and other elements in physical education the value of a healthy body, and this sense of the wholesomeness of physical well-being will be a decided advantage in the test time of early and middle adolescence.

The natural beginnings of sex instruction are in the home and are suggested by the normal curiosity and problems of child-life. The questions of a child concerning birth and sex development should be frankly answered by his parents. It is unfortunate that matters of sex are so commonly associated in the minds of adults with improper imaginings and the strange mental taboo which is so prevalent, so that it is hard for many people to give information wholesomely and naturally to their children. But we must break away from the unfortunate faults of the moral education of the past from which most of us suffer. We may assure ourselves that the impropriety of discussing sex matters which we feel is not in the mind of a child until it is stimulated from without. The child is intellectually curious and our failure to satisfy this curiosity only leads him to feel that there is, about matters of sex, something impure and improper and there are usually plenty of older people ready to assist and stimulate this conception.

In the schools we cannot do the work which parents should do in the home, and many teachers cannot give any profitable direct instruction concerning sex matters; but all teachers can and should teach many things which are closely related to the sex education problem, such as the ideals of physical education, the importance of personal cleanliness, exercise, and fresh air. They may develop ideals of personal courtesy and some of them may have the opportunity of describing and explaining the processes of fertilization and reproduction in the life of plants and lower animals so that the further information involving human sex will be naturally related to this earlier information. It is of the very greatest importance that boys and girls as they approach adolescence have a sufficient degree of information concerning the processes which in that strenuous period will present their insistent problems. Both boys and girls frequently meet this period with an utterly inadequate mental and emotional preparation. Any opportunity that may come to you to help perplexed boys and girls should be valued.

How Morality May be Developed

It must be remembered that the moral conduct of children is chiefly a matter of habit and that we can develop in our children good habits which will lead to the higher types of moral conduct. Let us remember too that children are highly imitative and that our behavior stimulates them to similar behavior. It is true that nature does much for children in proving to them that selfishness and cruelty cause pain and sorrow, but we can aid in the development of character by preparing an active program in which children shall have large opportunity for doing things for other people and may find the joy of receiving gratitude and having the sense of kindly service done.

Morality and freedom.—An important lesson for all teachers or would-be teachers is that moral conduct cannot be the result of force or coercion. The only way a child can learn to make right choices is to make them, and to be effective these choices must be actual and free. It is our work to encourage right choices without invading our pupil's field of choice. To be sure, there are forces against us. Even children feel the pull of temptation to unsocial conduct. But if the adult guides of childhood are faithful to their trust they that are for us are more than they that are against us. There are many native impulses that can be utilized in the interest of a wholesome moral development, and these are a teacher's ready re-enforcements.

Social approval.—The love of our pupils for social approval may be used to encourage conformity to the higher principles of social behavior. Norman MacMunn describes his method of dealing with boys whose conduct was distinctly anti-social. He would ask the class to vote on the question whether all the class should do the same thing that the one boy had done. It is said that the result of this vote was always that the anti-social conduct was abandoned.[3] The pressure of public approval or disapproval is a strong force that can be utilized in the interest of the development of good habits and the repression of bad ones.

Co-operative projects.—Another important means of guidance is co-operative activity designed for a social purpose. Children learn to do by doing. They learn to be unselfish by doing serviceable and unselfish things. A large part of our educational program should be devoted to service projects in which teacher and pupils can co-operate in positive expressions of good will. Even little children should be encouraged to co-operate in useful work with those who are older. It may be easier for the busy father or mother to do the household tasks alone, but by denying to the child the privilege of helping they lose one of the greatest educational opportunities. In our church schools we should make ample provision for actual co-operation in altruistic service by many more vivid and original

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The Child's Path to Freedom, pp. 65, 66.

projects than preparing scrapbooks for sick children or gifts for children in mission fields.

Confidence.—One chief secret of our guidance of the developing character of our pupils lies in retaining and being worthy of their confidence. If our pupils will trust us to help them in their problems, we can save them many distresses. Unsympathetic or careless parents or teachers may cause for a child the keenest of suffering and be altogether unaware of the fact. It is possible for adults to stimulate in children a very undesirable type of conscientiousness. The imagination of childhood may be stimulated by our condemnation of dishonesty, for example, so as to exaggerate a misdeed out of all proportion. Thus a little child of five who had evidently been taught very strictly concerning the Sabbath, discovered that she had performed some slight activity on Sunday and reports that she suffered agony in feeling that she had committed a dreadful sin. Older persons can be of real help to boys and girls by encouraging the free discussion of their moral problems.

PROBLEMS

1. How can we train the habits of infants and little children so as to aid them later in moral living?

2. How does the vocabulary of an only child differ from that of a child in a larger family? Consult mothers in getting your answer or make a careful observation of the vocabularies of two children.

3. Report to the training class any incidents in the lives of children you know that prove their egoistic tendencies.

4. How can we know when a child recognizes the difference between right and wrong?

5. Should we encourage a child to report the mischief of other children?

6. What are the values of the "gang" spirit?

7. How do the social groups of girls of twelve or thirteen differ from those of boys?

8. How should we treat the untruthfulness of children? Is it all equally blameworthy?

9. What kind of hero stories or stories of heroism are best for boys? for girls?

10. Are girls interested in adventure stories?

11. How can we best encourage thrift in children? Is there ever danger of overemphasizing the saving of money?

12. What is the best way to teach courtesy?

13. How can a church-school teacher help her pupils meet their problems of sex relationship?

14. Should the teacher of religion ever scold?

15. How can we secure the values of social approval for the shy pupil?

Books For Further Reading

Child Psychology and Religious Education, Wilson, Chapters VI and VIII.

Childhood and Character, Hartshorne, Chapters XI, XIII, and XVII.

A Social Theory of Religious Education, Coe, Part III.

Individuality and Education, Leighton, Chapter V.

Girlhood and Character, Moxcey, Chapters VIII, XIV, and XVIII.

Psychology of Middle Adolescence, Moxcey, Chapter VII.

Varieties of Adolescent Experience, Mudge, Chapter VIII.

The High School Age, King, Chapter VIII.

Introduction to Child Psychology, Waddle, Chapter IX.

The Religious Education of Adolescents, Richardson, Chapters IV and VI.

CHAPTER XI

RELIGIOUS LIFE AND EXPERIENCE

RELIGION is not an experience that comes full-grown into the life of a man or woman. It develops from simple beginnings in childhood, the faith and wonder and good will that are normal elements in child life, through the changing and shifting experiences of adolescence, into the religion of maturity and even then is modified by all the forces that play upon an adult personality. Like the capacity for moral behavior, with which it is closely related, it begins in a very simple form. It requires experience to develop a religious consciousness and a religious attitude, but very early in childhood there normally begins a modification of various instincts that will lead to the development of religion in the individual.

It must not be thought, however, that even the simple attitudes of childhood are without their complexities. No state of the human mind is altogether simple. It is a great error to disregard the connections in a child's experiences, his memories, his feelings, and all the complicating associations of his mind in the interpretation of what seems a simple faith. We shall try to show some of the tendencies observable in child life that characterize the beginnings of religion and that have an important and vital bearing upon all the religious experiences of later life. Many instincts, perhaps all, make their contribution to this most complex of human experiences. There are certain native tendencies that tend to develop some sort of religious conceptions and ideas and there are a great number of instincts and feeling attitudes which contribute, both in infancy and in later life, to religion.

The principle of causality.—A child early learns to seek for the causes of things. Being himself a cause of certain movements, sounds, and other reactions, he is interested not only in producing these effects, but also in observing the effects from other causes. A child's mind soon associates the action of a playmate in hitting a drum with the resulting sound. Having observed causation in himself and in his parents and playmates he imputes causation to actions of animals and of inanimate objects. He recognizes a connection between the wind and the movement of the branches of the trees, between the sunshine and the warmth of a spring day. Out of this principle of causation comes the beginning of a child philosophy. Something is the cause of every experience, of every action. Sometimes he cannot see or understand what is the cause of a given action, and at this point it is at least easy for a religious conception to be implanted. Just what kind of a religion a child would develop if he were taught nothing of our organized religious systems is hard to know. There is some warrant for the belief that a child through this principle of causation would derive some spontaneous conception of a cause to explain the phenomena not otherwise understandable. However this may be, a child develops very early a conception of causality which makes possible instruction concerning God as a first cause.

Animism.—Closely related to the principle of causality is the animism of childhood and primitive peoples, the conception of all things in nature as alive. One child at the age of two years and eleven months, apostrophized the wind saying, "Wind, stop blowing!" She also asked, "Where did the thunder go?" perhaps with an idea of the thunder as an objective being. Probably many children have spontaneously interpreted thunder, rain, and other natural phenomena as the activities of God or angels or some other living beings, depending on the instruction which they have received concerning God. A university student reports as a child experience: "When it thundered I thought God had two very large wooden wheels like those two large 'bull wheels' they use on oil wells. I thought he rolled those across the sky and that produced thunder."

Another says: "I remember when I was a small child I thought that there were fairies which did good deeds and there were bad fairies. I thought when the wind blew softly that the fairies were pleased and when it blew hard they were angry. I also thought the birds, trees, and animals could talk, and I often used to wish that I could tell what they were talking about."

Still another student recalls that she as a child "imagined a huge water wagon away up above the sky, rumbling over the stones and sprinkling water on the earth."

It should not be forgotten that even a child's toys may have for him a personality. The little girl's doll is very real to her. And so there is something actually immoral for children in a poem that used to be printed in school readers, suggesting that a little girl should be glad it was her doll's head, rather than her own, that was broken. To the adult it is a desirable thing that a little girl should joke over the injury to her doll. To the child it is a tragedy. The doll is to her not a toy but a baby, toward whom she sustains such a motherly attitude as bears promise for the future of the race. Shall she be glad that dollie's head, instead of her own, is broken? To do so would be selfishness and disloyalty, and the little mother of the play-time world is developing within herself the qualities that are to make her the affectionate and considerate and sympathetic mother of future children.

It is natural for the mysticism of religion to make easy connection with this childish animism. Living in a world of the physically unseen, a world in which fairies live, in which unseen, imaginary playmates are part of the social environment of a child, especially of one otherwise lonely, children easily develop a conception of invisible spirits and of the unseen God.

Reverence.—The beginnings of an attitude of reverence may be found very early in child life. If a child observes in older persons an attitude of worship and reverence in prayer or in the church or when grace is being said at the table, a similar attitude is very easily induced. It is not always parental authority which keeps children quiet in church. Quiet music, the beauty of church architecture, the serious attitudes of the worshipers, all produce a significant effect upon even a little child. This does not mean that a child's attention may be held through a long church service in which there are elements beyond his comprehension, but rather that a service of worship adapted to his child experience has a deep appeal. The little folks, during the kindergarten years, are most sensitive to the wonder and mystery of things. Their sense of the poetry of life should not wither, but should be disciplined and deepened until it becomes a reverent insight into the profounder meanings behind and within the laws of nature, the acts of individuals and the events of history. But the fact that a child is capable of a reverent attitude does not mean that his inner religious experience is like that of an adult.

Ideas of God.—Religion to a child is not a subjective experience so much as an attitude toward what is objective and external to himself. To many children God is a great man whom it would be possible, if one were to find the right place, to see. One college student reports her childish conception of God as a triangular being. She discovered later that what she thought was God was a large pine tree on a distant horizon. I have examined statements from several hundred children from six to fourteen years of age and of these seventy-seven per cent seemed to have a clearly visual and anthropomorphic imagery of God. A small proportion of high-school students have such a visual imagery, but it has very noticeably decreased in the college students until in most of the advanced students this visual element is very slight. The religious experience of adults has become internalized and the visual elements in their imagery have correspondingly lost their vividness.

Probably a large part of the visual imagery of God which children have owes its form to the teaching of adults. In fact, a large proportion of the undergraduate students whom I have examined recall a visual imagery of God in their childhood and attribute this to pictures that they have seen, usually pictures of Jesus or of Old Testament characters. It is natural that a child having a conception of God should have some conception of the place where he may be seen. Thus a little child asked one day, "Mother, who gave me my foot?" and when her mother said "God did," her next question very naturally was, "Where is God?" A little girl had the notion that the face she saw in the moon was God "and that he watched us day and night, and if we were naughty some day he would punish us for it. I thought he would send a man with a large covered wagon to get all the bad children."

The God-idea is to many children complicated by what they have been taught concerning punishment. The attitude of many adults is affected by the childish conception of God as a policeman or detective, chiefly concerned in spying upon their wrong deeds. One student says: "I thought God was a very large man who sat above the blue in the sky. When I did anything naughty I was told that God was watching me and that he knew everything everyone did. I imagined him to be a person who sat at a small desk and had his meals brought to him and never moved his head but kept his eyes fixed upon the people." The student who recalls this experience seems to have been a very sensitive child who "thought of the simple things as very great and beautiful." She says: "I remember one rosebush which I felt was almost sacred because of its beauty and whenever

I was near it I almost did not dare to touch it." Such childish sensitiveness may not be uncommon.

Many children think of God as a great giant somewhere above the earth. One young man says: "As I remember my conception of God in early childhood, I thought of him as a great giant who was up in the sky at a height where he could see the whole world at one time."

A young woman recalls that in a thunder storm she "thought that God was moving his giant furniture about a giant room and that the rain was merely the scrub water that ran down. I believed that the lightning was nothing more than his turning off and on an electric switch."

Another describes the following child conceptions: "In my childhood I had an impression of God as a real human being of very great size. I imagined him on a throne, 'way up high in the sky, except during his working hours. I thought that during them he walked about on the earth. My idea of the origin of our family was rather singular. It was that God had a workshop under an apple tree across the road from our house. In this workshop he had heads and bodies, etc., sitting about on shelves and whenever a family was to be made he would fit the heads to their respective bodies and presto-change there was the entire family even to the dog or cat. I have a distinct mental picture of my grandfather, father, mother, myself, dog and cat, crossing the road in single file and entering the house."

Parental and filial attitudes.—The conception of God as a father is effective because of the parental instinct in children and because of their attitudes toward their parents. An essential chapter in the development of religion is the attitude of children toward their fathers and mothers. Our highest conception of God comes to us in the figure of fatherhood presented in the teachings of Jesus, and in the corresponding picture of motherhood. "As one whom his mother comforteth," a child should learn of God through his experience of maternal care. The parental instinct appears early in childhood. It may be seen in a child's love for a doll, in the affection of a child for still younger children, and in the protective attitude of children toward their younger brothers and sisters. Besides this natural parental tendency should be mentioned a child's response to his own parents. We cannot overestimate the importance of kindly and sympathetic parental treatment of children in influencing the developing of religious and moral attitudes.

Fear.—Fear in a highly sublimated form is doubtless an essential element in religion. It enters into the experience of awe and the feeling of reverence. Its rightful place in religion has frequently been misunderstood. The fear that "hath torment," the fear that is mere terror or fright, is not the most worthy element in religion, but that sublimated fear which recognizes the greatness of the universe and the majesty of God is of very vital importance. Unfortunately, much of our teaching has emphasized the less worthy type of fear, so that many children have felt an attitude of revulsion rather than of attraction toward God and religion. The following quotations indicate the experiences of several students who recall, in some degree, the feelings of their childhood:

"I remember when I was a child I was afraid of God. I used to think he was a terrible person. I could not understand, if he was as good and kind as I was taught he was, why I could not see him. I thought he hid up behind the clouds to catch little boys and girls. I could see him in the clouds watching them. I was afraid in the dark."

"I can remember lying awake at night, particularly after I had been naughty."

"Religion seemed to stand by itself as a terrible word. It seemed that religion was just 'evils and their punishment by God.' "

"When very young I learned a great many Bible stories and verses. But I thought of God as a human being, though many times as large as man, sitting upon a throne in the clouds, who told us through the Bible what to do and what not to do and punished us when we did not obey. Although I joined the church at the age of seven, it has not been until recently that I have learned to love God as a father."

"One evening during our customary family worship at home I heard my father read a part of the story of the Judgment. I knew I was often sinful and, according to the Bible, I would have to suffer eternally. I was only eight years old and did not understand the Bible as I do now. My father read that the Judgment was soon to come and my impression was that it was within a few days. Before he finished reading I was trembling and frightened."

"I can remember being in awe of my Sunday-school teacher and the pastor. I felt that they were a different sort of beings from my home folks whom I loved. I felt that they were there merely to warn and threaten me of what was coming and to show the great difference between my sinful nature and their devout experience. I did not desire to have an experience such as theirs and wanted to see as little of them as possible. They may have known the Bible, but certainly ignored the impulses and instincts of children."

Distrust.—Children have impulses to be courageous as well as to be afraid, and it is certain that doubt and distrust are far less noticeable in children than are confidence and good will. Still, there are some evidences that some children distrust their parents and teachers and come to feel a sense of distrust or even an unfriendly attitude toward God. Most of these instances, I think, are traceable to faults in the teachings which children have received or to disillusionment concerning the characteristics of older people. It is hard to realize the effect which injustice, dishonesty, or misunderstanding may have upon children:

"As a child I thought everybody liked me. It was the greatest shock of my young life when one day I discovered some one who did not. After that all my world seemed different to me."

Occasionally a child, having a very literal conception of prayer as petition that is sure to be answered, makes a test that brings disillusionment and a degree of doubt. The following quotations are from the accounts of two students:

"At about ten years of age we had a lesson on faith. I thought all I had to do was to ask and I would receive. I knelt by my bed and prayed that the clothes-press would be full of silk dresses. I waited about five minutes and during that time a suspicion of doubt entered my mind. I arose, looked in the clothes-press but saw no silk dresses. Then I grew angry and stamped my foot. Then I said, 'There isn't any God.'"

"My opinion of God when a child is somewhat hazy, except for my keen disappointment in being told I should pray for what I wanted, and if a good girl I would receive it. I believed I was a good girl and I prayed for a new silk dress like my Cousin Florence had. I prayed and waited a few days. But alas! no silk dress was waiting for me and I refused to say my prayers until Aunt Carrie told me that perhaps the Lord thought some other little girl needed a new dress more than I did."

Love and trust.—An attitude of confidence and good will is much more characteristic of childhood than one of distrust and dislike. A child commonly loves and trusts his parents as long as they are worthy of affection and confidence. A friend one time witnessed a demonstration of trustfulness in the life of a little child two years old, a trustfulness which commonly extends to other adults as well as to one's parents. This child was on the platform of a train and at the call of a stranger jumped from the platform into the stranger's arms. Most children of similar age would jump confidently into the arms of one of their parents, and some have even jumped from a high place into the dark at the father's call, confident that they could trust to his catching them. Although children are at first self-centered and egoistic, they acquire an affectionate attitude toward their parents and friends that under proper training develops into a real personal love. When attitudes of love and confidence are encouraged, when God is pictured as a father and described in terms of love and confidence, religious development is natural and wholesome. One student describes such a development in her experience:

"I thought of God as a great big man who could see everything I did. As I grew older he grew more humane to me. Finally when my own father died when I was still quite young he seemed to blend with papa. I would tell everything to him and when particularly lonely for papa I would go out of doors and gaze at the heavens and would seem to see him in papa's form, smiling comfortingly at me. Even to this day I have retained that idea of God's being a loving Father."

Sense of right and wrong.—We should not expect a child's ideas of right and wrong to coincide exactly with those of adults. Children live in a different world from that in which adults move and in different social relationships. It requires time and social experience to develop the ethics of child life and it is the work of childhood and adolescence to lead gradually from the egoism of infancy to the normal high development of social understanding and morality in adult life. A child frequently has a very keen conscience, many times being deeply concerned over trivial or imaginary faults. Students have reported the following recollections:

"To kill a mouse was as bad as to kill a man. I cried for hours once when my mother killed a mouse."

"When I was a little girl I had a battered, dilapidated doll. I thought more of this doll than of any other. My father said that if I would give this doll to the pigs he would buy me a nice, new one. But I would not give up this old one. I was living up to the ethics of childhood."

"How I hated to go to church! My nurse used to say, 'God doesn't like little girls who don't go to church.' Thereupon I would go to church and would come home with my stockings dirty from kneeling on the benches. Then nurse would scold and I would wonder which was worse, to stay home and displease God or to go to church and displease nurse by getting my stockings dirty. I never came to any conclusion concerning the matter."

"One day a friend came to see my mother. She had two little girls with her, a fact which quickly lessened the distance between us. But before she left she asked me if I had ever received a whipping. My attitude was suddenly changed and I took a dislike to her, although she was just teasing me. I did not wish to tell her I had, for it seemed such a disgrace, but I could not say I hadn't. I stood in the doorway in a very embarrassed attitude, but I did not answer her question, nor did I ever speak to her again."

Interest in action and persons.—It is important for those who are directing religious training that they appreciate the dominant interests of children. Both the method and the material of religious education should be chosen in the light of these interests. The time comes in adolescence when boys and girls are at times more meditative, when their attention can be held for a longer period to a subject of thought, and when they are becoming interested in abstract thinking. Children are interested in the concrete, in the active, and in the personal. They are distinctly interested in other children, in stories of children and in stories in which action predominates. The studies in the interest of children in the Bible made by Professor Dawson show results in harmony with these statements. He finds that children up to eight or nine years are more interested in the parts of the New Testament which tell of the birth and childhood of Jesus. They are also interested in Old Testament stories relating to childhood. From nine to thirteen or fourteen he finds children more interested in the Old Testament, particularly in the active, dramatic, and heroic elements. That seems to be the period when hero stories from various sources are of great interest to children. Interest in the New Testament is more marked in adolescence, but throughout childhood he concludes that children are more interested in persons than in any other element of the Bible. Children develop quite early a sympathy for individual suffering. One student who recalls that "we used to almost cry when a tree was cut down because of how it must hurt the tree," also remembers reading of the crucifixion of Jesus: "As I read about his death I cried, because it seemed so real and I could see him in his pain."

Child religion and adult religion.—Child religion is, of course, constantly affected by the religion of adults. It is difficult to distinguish between the ethics of childhood and the ethical ideas that are derived from adults. A child's ideas of right and wrong are but imperfect representations of those of adult life. Many young people have reported to me from their recollections of their childhood that they had a very inadequate conception of adult ethics. Certain elements in their childish ethics were quite contrary to the moral ideas of adults. One student says:

> "Some things were very hard to understand. Once at the dinner table when guests were present I said my cousin did not go to church because he didn't have a clean shirt to wear, and my father looked at me so darkly. I will never forget that look. I had told the truth. I didn't enjoy the rest of my chicken, and for intervals of weeks I used to wonder about it."

Adult ideas of religion are sometimes extremely puzzling to children. One child's imagination was stirred by the verse, "'Even the very hairs of your head are numbered.' I vainly tried to count mine and I came to the conclusion that God certainly must be wonderful to keep track of the number of hairs in everybody's head, especially when they keep coming out and new hairs keep coming in." How children misunderstand the Bible has been illustrated again and again. A Sunday-school teacher told at Christmas the story of the birth of Jesus and then asked the pupils to learn a verse, John 3. 16. They all learned to say the verse, but one little boy went home and told his mother that the teacher told a story and taught them a verse in which she said "that God sold out and gave away his Son." The religious instruction of children should always have as a background a knowledge of a child's experience, a child's interests and, as far as possible, a child's understanding. If we examine into the mental experiences of a child, we shall find many misunderstandings growing out of the teaching which we have given them. However, there is something reminiscent of primitive religion in the case of one student who recalls a childish experience: "An odd idea of mine about praying I can remember distinctly. I always imagined that the reason one knelt when saying one's prayers was to do something uncomfortable to show God that I loved him. One night I got into bed without saying my prayers, but I was very sleepy and cold and I could not get back out of bed to kneel down so I did the most uncomfortable thing I could think of. I leaned on my elbows to repeat my prayer, and feeling I had done the right thing, I fell asleep."

There are probably many people who have a recollection similar to that of this student: "The most vivid recollection I have of my childhood is of sitting in church on Sunday morning and wishing the minister would hurry."

It will be well for our children when we consider the most effective means of developing the spirit of worship in forms adapted to the needs of developing childhood and youth, rather than requiring children to sit still during a long period of adult worship that may be to them mysterious and meaningless.

Variety in religious experience.—We should expect all our pupils to be religious and to develop an ever-deepening experience; but we have no right to expect uniformity in their religious experience or its expression. The wide variations in temperament have been described in an earlier chapter.[1] These native and constitutional differences continue throughout life and are one inevitable reason why any close uniformity of experience is impossible. Besides the temperamental differences, we must also consider many other factors that tend to cause variation. We should not expect the religious experience of boys to be just the same as that of girls. We need not expect the same experience in the subnormal that we find in a supra-normal pupil. It is doubtful if religious experience can be the same to people from different social environments and with different social backgrounds. Perhaps the greatest factor in the variation of experience is that due to difference of age and development. The religious life is subject to the law of development. It was said of Jesus that he "advanced in wisdom and stature and in favor with God and men." Thus, normally, do all children grow intellectually, emotionally, morally, and religiously.

The religion of adolescence.—With adolescence an infinity of changes takes place in the religious life. God gradually comes into a more intimate social relationship. He is not merely a powerful Being, like a great man, among the clouds; he is a great Spirit, near us, even within us. A deeper loyalty than was possible in childhood develops. Ideals are born and develop in the very soil and atmosphere of these new religious attitudes.

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[1] Pages 159ff.

In the case of some fortunate boys and girls there is a gradual transition from the simple faith of childhood to the more highly developed religion of adult life. In other cases there are obstacles to such progress. Habits are developed that are inconsistent with the ideals of religion. The result is a tendency toward the disintegration of the personality. There is inner struggle between the better and the worse elements that contend for control. In some cases this struggle becomes very vigorous. The inner stress and strain seem necessary before there can be a victory of the better self over the worse. A wholesome outcome of such an experience as this may be what has been called the cataclysmic type of conversion. I have mentioned two extremes of adolescent experience. Between these there is room for a wide variety of religious experiences, differing according to temperament and other conditioning factors, but tending, under careful leadership, to a wholesome integration of Christian character as our boys and girls approach adult life.

PROBLEMS

1. Recall and record, as far as possible, the developments in your own religious ideas and experience during childhood and adolescence.

2. What differences in the religious experiences of your pupils can you trace to differences in temperament?

3. Ask a number of children, of various ages, what God is. Compare their replies.

4. Examine various courses of religious instruction for pupils of a given grade. Compare them as to their adaptation to the needs of the pupils.

5. What arguments can you give for the grading of church-school lessons?

6. At what age should boys and girls become voluntarily affiliated with the church?

7. What are the values of an annual decision day?

8. Examine the hymn book used in your departmental service of worship. Are the hymns well adapted to the needs and interests of the pupils? Are they conducive to worship?

9. In what parts of the Bible are pupils of the various age-groups most interested?

10. Read Coleridge's "Hymn Before Sunrise in the Vale of Chamouni." How can we stimulate in our pupils a similar religious interpretation of nature?

Books For Further Reading

The Spiritual Life, Coe, Chapter III.
The God-Experience, Mudge, Chapters II and XVII.
The Child and His Religion, Dawson.
The Psychology of Religion, Starbuck.
The Varieties of Religious Experience, James.
The Psychology of Religion, Coe.
A Social Theory of Religious Education, Coe.
Introduction to Psychology, Seashore, Chapter XV.

The Psychological Phenomena of Christianity, Cutten.

Introduction to the Psychology of Religion, Hickman.

The Spiritual Basis of Man and Nature, Halfyard, Chapter III.

The Pupil and the Teacher, Weigle, Chapter XI.

Social Psychology, McDougall, Chapter XIII.

Girlhood and Character, Moxcey, Chapters VIII and XX.

The Psychology of Middle Adolescence, Moxcey, Chapter X.

Child Psychology and Religious Education, Wilson, Chapters I and XI.

CHAPTER XII

HOW WE MAY INFLUENCE OUR PUPILS

In the foregoing chapters we have shown in broad outline what our pupils are. As teachers we are further interested in what they shall become. Our task is not merely to study them, but to direct their development. When we attempt, however, to formulate principles of education and methods of influencing the lives of our pupils, we are forced back upon our study of their nature, development, impulses, and interests. A thorough understanding of the means of influencing and directing the development of the characters of our pupils will require a further course or courses of study. All we can attempt to do in this chapter is to outline a few of the principal ways by which we can influence the lives of others.

Unconscious Influence

An immeasurable proportion of the influences that play upon and affect human personality are unconsciously applied. Patterson Du Bois devotes a long chapter of his book, *The Natural Way,* to what he calls "nurture by atmosphere," the education that operates unconsciously and indirectly through the feelings. Logical thinking is of great importance to any educational program, but we shall never forget the influences in which the feelings, the more vigorous emotions, and the finer and more delicate sentiments, are of prime value.

The pervasiveness of feeling.—Listen to the conversation of your friends for a few hours and you may be surprised at the number of expressions used to indicate feelings. Even if they argue certain points of controversy or study together the reasonable basis for some theory or belief, their language will be full of feeling terms. They will express their likes or dislikes, their desires or fears, and in the very statement of intellectual beliefs will reveal the feelings that always accompany ideas. Indeed, when they say "I think," they may really mean "I feel." It is an interesting exercise to study the actions and facial expressions of the people we pass on the street. Again and again, by their interested inspection of shop windows, by smiles or frowns, by their quick or lagging steps, they will reveal to the observant eye the feelings that they have no intention of showing.

Home atmosphere.—Very early in infancy the feeling life is affected by the influence of the home environment. Horace Bushnell was keenly appreciative of these early influences, as is shown by a paragraph from his *Christian Nurture:*

"Observe, again, how very quick the child's eye is, in the passive age of infancy, to catch impressions and receive the meaning of looks, voices, and motions. It peruses all faces, and colors, and sounds. Every sentiment that looks into its eyes, looks back out of its eyes, and plays in miniature on its countenance. The tear that steals down the cheek of a mother's suppressed grief, gathers the little infantile face into a responsive sob. With a kind of wondering silence, which is next thing to adoration, it studies the mother in her prayer, and looks up piously with her, in that exploring watch, that signifies unspoken prayer. If the child is handled fretfully, scolded, jerked, or simply laid aside unaffectionately, in no warmth of motherly gentleness, it feels the sting of just that which is felt toward it; and so it is angered by anger, irritated by irritation, fretted by fretfulness; having thus impressed just that kind of impatience or ill-nature which is felt toward it, and growing faithfully into the bad mold offered, as by a fixed law. There is great importance, in this manner, even in the handling of infancy. If it is unchristian, it will beget unchristian states or impressions. If it is gentle, even, patient, and loving, it prepares a mood and temper like its own. There is scarcely room to doubt, that all most crabbed, hateful, resentful, passionate, ill-natured characters; all most even, lovely, firm and true, are prepared, in a great degree, by the handling of the nursery. To these and all such modes of feeling and treatment as make up the element of the infant's life, it is passive as wax to the seal. So that if we consider how small a speck, falling into the nucleus of a crystal, may disturb its form; or, how even a mote of foreign matter present in the quickening egg will suffice to produce a deformity; considering, also, on the other hand, what nice conditions of repose, in one case, and what accurately modulated supplies of heat in the other, are necessary to a perfect product; then only do we begin to imagine what work is going on, in the soul of a child, in this first chapter of life, the age of impressions."[1]

Social stimulation.—Not only in infancy but all through life one is influenced by the attitudes and habitual behavior of those about him, that constitute the subtle social atmosphere, even more than by consciously applied intellectual teaching. Indeed, nothing is educationally more important than that a child be surrounded by friendly, sympathetic people who will provide the conditions for a well-balanced emotional life. Children may be permanently harmed by harshness of treatment, by being thoughtlessly frightened or by observing moral coarseness and a lack of courtesy. On the other hand, they may be directed toward a finer appreciation of the good, the true, and the beautiful, and encouraged in a life of Christian character by that social atmosphere that we can help to create for them.

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[1] Pp. 240 and 241.

IMITATION

Doubtless you have observed in children and young people a tendency to imitate the behavior of others. Two types of imitation are quite early distinguishable.

Unconscious imitation.—Without any intention of imitating, a child will follow with his own actions the actions of those about him. He will pick up the mannerisms, the peculiar gait or facial expression or vocal habits of father or mother. Probably this tendency is strongest in childhood, but it is sufficiently effective, even in adult life, to give some warrant to the claim that a husband and wife after years of association tend to resemble each other. Imitation has been observed very early in infancy. Children learn many things by imitating adults or older children. All through life the tendency to imitate others provides an element of social conservation and stability, while it also makes dangerous the contagious action of crowds and mobs. As teachers we should not forget that we are objects of imitation, at least as long as we hold the admiration of our pupils. Little children are apt to fashion their behavior on that of their teachers, and adolescent "crushes" frequently involve the imitation of a favorite teacher or other older friend.

Conscious imitation—Many of our pupils develop a conscious and voluntary imitation of the behavior of others. When Frances Willard was told that she resembled a noble relative she determined to be "very noble-looking." When our pupils deliberately try to resemble us, we may be gratified, but we are conscious of a great responsibility to be a worthy pattern. The true teacher, however, will not be satisfied with a mere imitation of a pattern. Such a slavish devotion to copying the virtues of others leads to mental stagnation and defeats the ends of social progress. Imitation should have—indeed, will have—a very important place in education, but it should be supplemented by the encouragement of initiative and a degree of independence.

SUGGESTION

There is a very close relationship between imitation and suggestion. Indeed, imitation may be considered a type of response to suggestion. Webster defines suggestion as "the entrance into the mind of an idea or intimation, originated by some external fact or word, which tends to produce an automatic response or reaction." Sometimes this reaction is similar in form to the original stimulus. There are, however, cases of apparent imitation in which the resemblance of one's action to that which precedes it is due to custom and habit rather than to the tendency to imitate. For example, a gentleman bows to another gentleman and a similar bow is returned. This looks like imitation, but it is really a conventional response to suggestion. If the gentleman meets a lady, he doffs his hat, but she does not attempt to imitate his action. Custom provides in her case a different response.

Abnormal suggestion.—The study of suggestion is encouraged by the attention paid to hypnotism by psychologists. Hypnotism is really an unusually heightened state of suggestibility and gave rise to the early idea that suggestion itself is something abnormal. It has been found, however, that suggestion, in its milder forms, is of great educational value, and that it is essential to all degrees of personal influence. Suggestion in the abnormal degree of hypnotism should be employed with great care and discrimination. It is useful, however, to consider thoughtfully the possibilities of normal suggestion.

Normal suggestion.—It is by means of suggestion that one personality comes in contact with and influences another. You cannot directly communicate a thought from your mind to that of your pupil. However, by certain symbols called words, either written or spoken, you can suggest to your pupil an idea that he can in some degree make his own. Suggestion has various educational possibilities. It may be used for good or evil. It may be used by the church school in the interest of the higher life of its pupils or may be used by criminals, vicious associates, or low-lived companions to lower the ideals and aims of life.

Variations in suggestibility.—The tendency to respond to suggestion appears very early. Childhood is noticeably suggestible. In adolescence effective suggestions must be of a somewhat different type, but youth in general is responsive to suggestion. But in all periods there are wide individual variations. Some are highly suggestible while others are slow to respond. As one acquires settled convictions and a power of criticizing new ideas his suggestibility decreases. It never disappears, however, as a trait of any normal mind. The influence of crowds, the methods of salesmanship, sermons, court pleading, and many other common efforts to influence people bear witness to our general suggestibility. Let a man stare into a shop window and others are likely to stop and stare. Let one of your pupils cough in class and others are likely to begin to cough. Let a teacher speak softly and reverently in a worship service and the pupils are much more likely to be reverent than would be the case if she spoke loudly and acted indifferent to the service.

Types of suggestion.—Various types of suggestion may be distinguished. Because they differ in efficiency they should be understood by every teacher.

1. Suggestion may be distinguished as *direct* or *indirect*. The *direct* suggestion is in the form of a statement to be accepted by your pupil as it stands. Direct instructions or statements of fact have their

place in education. They are, however, relatively less effective than *indirect* suggestions. An example of a *direct* suggestion may be requesting one of your pupils to close a window. The *indirect* method would be to mention a cold draft of wind or ask if your pupils are too cold, in such a way that the pupil nearest the window will recognize the opportunity to be of service. There is *direct* suggestion in the statement of a fact, in assigning a lesson to be remembered by your pupils. *Indirect* suggestion may be involved in your indicating the source where they may obtain the information. The author recalls a morning in his student days when he went into the lecture room of a great teacher of natural science with a strange bug that he had discovered on his way to class, and asked what it was. The professor might have answered directly, giving the name of the bug. He did not do so, but instead pointed to a row of books in the rear of the room and said, "There are some books on bugs." Indirect suggestion depends for its force upon the personality and influence of the teacher and upon the teacher's knowledge of the dominant "drives" and impulses of the pupil. Especially in the case of adolescent pupils it is a very important element in education.

2. *Positive and negative suggestion. Positive* suggestion is relatively stronger than negative. It has been said that the easiest word to forget is "not." Ruskin, with quite another lesson in mind, pictures a group of children who were admonished not to pull the brass tacks out of the upholstery. The result of this *negative* suggestion was the discovery that pulling out brass tacks was a delightful

adventure, and the children occupied themselves with a bit of mischief that would not otherwise have come to their minds. A teacher should be able to control the situations in the classroom with a minimum of negative orders and suggestions.

3. *Conscious and unconscious suggestion.* We are influencing our boys and girls, whether we intend to or not, not only by our *conscious* efforts to instruct, influence and guide, but by our *unconscious* behavior. It is doubtful if a teacher, by direct and carefully planned instruction in the niceties of personal etiquette, can affect his pupils as well as by his own courtesy and thoughtfulness. Similarly, the teacher of religion may be able to accomplish more by her own religious spirit than by any formal instruction in the classroom. Certainly, instruction in religion without consistent religious behavior cannot be expected to be effective.

Suggestibility and religion.—Doctor Coe has indicated that there is a close relationship between one's religious experience and one's type of *suggestibility.* Some pupils respond very readily to our teachings and suggestions. Others are slower in reaction. Some pupils are credulous, accepting whatever we say with relatively little question, while others insist upon working out problems for themselves and refuse to accept our statements. The latter type of personality is very apt to appear in unusual strength in adolescence, so that adolescence quite commonly involves periods of doubt and a refusal to accept the statements and beliefs of older people. In general, we should recognize such variations in temperament as normal. An attempt to shape all our pupils according to the same mold, to force them into identical types of experience may do serious injury. An attempt to understand the nature of each individual pupil will be rewarding.

The power of suggestion.—The human mind being what it is, there is a high degree of power and a corresponding degree of responsibility given to parents and teachers. While we cannot absolutely determine what the rising generation may become, we can effectively guide through suggestion and influence, so that practically and actually one generation in great degree determines what the next shall be. This being true, the prayer of every church-school teacher should be:

"Let the words of my mouth and the meditation
of my heart
Be acceptable in thy sight,
O Lord, my rock, and my redeemer."

Companionship in activities.—The teacher of religion should realize fully the educational power in group activity. Our pupils learn to do things by doing them. They acquire habits of truthfulness, sympathy, and friendliness through successive acts that involve these principles. In acquiring these habits they are greatly helped by the fact that others are doing the same worthy things with them. The consciousness of fellowship with a class, including a sympathetic teacher and the sharing of purposes and satisfactions with the group, are potent aids in the processes of moral and religious education.

PROBLEMS

1. To what extent is the effectiveness of a teacher's work dependent on his health? his moods?

2. Have you ever noticed any effects of weather upon the effectiveness of your teaching?

3. Can one study well when disheartened or depressed?

4. What can you do to tone up the mental and moral "atmosphere" of your classroom?

5. What happens to the members of your class when a controversy arises and there is a sharp difference of opinion? What are the good or harmful effects of such a situation?

6. Should the great moral and religious decisions be made in the midst of excitement or after quiet study and meditation?

7. What are the advantages and disadvantages of rewards and punishments? On what laws of influence do they depend?

8. What should be our attitude toward the ridicule of children for the handicaps and peculiarities of other children?

9. Should we encourage our pupils to describe their most intimate religious experiences? What value is there in reticence?

10. What can we do to insure that our pupils read wholesome books? Why should we care what they read?

11. In what sense and to what extent can human nature be changed?

12. Why does a second or third child in a family often learn a vocabulary or learn to count more rapidly than the first child?

13. How much suggestibility is desirable?

14. What part does suggestion play in "crazes," "fads," and "hysterias"?

15. Some pupils are counter-suggestible, or have

a tendency to respond to suggestion by doing the opposite thing. Can you distinguish any of these in your class? How should one deal with such pupils?

16. Why did the "Great Stone Face," of which Hawthorne wrote, have such an influence upon the boy of the story?

BOOKS FOR FURTHER READING

The Teaching of Ideals, Charters, Chapter XI

Psychology For Teachers, La Rue, Chapter XV.

Childhood and Character, Hartshorne, Chapter XI.

Influencing Human Behavior, Overstreet, Chapters VIII and IX.

The Natural Way, Du Bois, Chapter III and IV.

Christian Nurture, Bushnell, Part II, Chapter I.

Psychology and the Teacher, Muensterberg, Chapter XIX.

The Intimate Problems of Youth, Rudisill, Chapter I.

Social Psychology, McDougall, Chapter IV.

Varieties of Adolescent Experience, Mudge, Chapter VII.

Psychology of Secondary Education, Judd, Chapter XVIII.

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